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—THE—

BULLETIN OF PHARMACY

A LIVE MAGAZINE FOR DRUGGISTS

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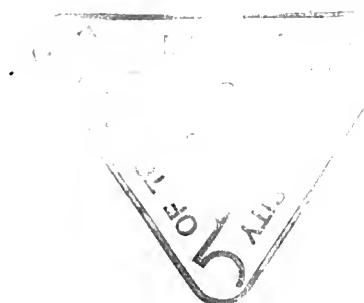
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THE MONTH'S HISTORY.

RENTAL OF \$110,000 A YEAR!

In the November BULLETIN we commented on the minimum rental of \$30,000 a year which the new Riker & Hegeman combination had contracted to pay for one of its new stores at the corner of Broadway and Dey Street in New York. Some years ago, during the life of the late W. H. Burke, it was said that the Central Drug Co., of which he was president, was paying a rental of \$40,000 a year for its Chicago store at the corner of State and Washington Streets. Now another great jump upward has been taken by the United Drug Co. of Boston, which has agreed to pay the enormous

annual rental of \$110,000 for the first floor of the new Greeley Square Hotel in New York City at the corner of 6th Avenue and 34th Street. The lease is to run for 21 years, and Mr. Liggett, president of the United Co., says that he considers this the most prominent corner in the United States, that under the circumstances the rental is cheap, and that already he has been offered an advance of 10 per cent by others. The store will have a floor space of 5500 square feet, so that the rental will amount to \$20 a square foot a year.

It may be said that the United Drug Co. is also renting other stands in New York and Boston, and its attitude is one of significance. It means that the company, dissatisfied with the extent to which the Riker people are pushing the Rexall goods, will establish retail depots of its own in the two Riker cities. The Riker agency for the Rexall products has been a matter of litigation in the courts for over a year, and until the two suits now pending have been settled it seems quite probable that the United Drug Co. can do nothing. Evidently, however, it is getting ready to open stores as soon as the litigation has been disposed of, and this means business competition in the retail drug trade on a pretty big scale. At one time it looked as though the Liggett or United group of 30 or more stores would be absorbed in the Riker & Hegeman combination, but, this failing, it is now clear that strong competition is to take the place of friendly amalgamation.

* * *

RIKER AND LIGGETT LITIGATION.

In the meantime the litigation between the Riker concern and the United Drug Co. is slowly developing. The United Co. recently filed an answer to the complaint of Riker in the injunction suit brought by the latter, and the interesting feature of the reply is found in a statement denying that the United Drug Co. is a coöperative concern. It is declared that the company is not now, and never has

been, a coöperative organization, that the articles manufactured and sold by it have never been distributed exclusively to its own stockholders at uniform prices, and that the number of stockholders has not necessarily been limited to one in each city or town.

The fight between these two big interests is an exceedingly engrossing one and the outcome will be awaited with a good deal of anticipation by the trade generally. Meanwhile the United Drug Co. announces that it is soon to begin the erection in Kansas City, Mo., of a plant for the manufacture of drugs and candies for the western stockholders. The reason for this is declared to be the enormous bills for freight between Boston and Chicago and still more westerly points.

While speaking of these combination movements in the drug trade it may not be uninteresting to report that the A. Spiegel Co. has opened the third of its chain of drug stores in Milwaukee at 126 Wisconsin Street. This is said to be one of the handsomest and best appointed pharmacies in the city.

* * *

**PRESIDENT TAFT
FAVORS A
PARCELS POST.**

In case our readers did not happen to see that portion of President Taft's annual message to Congress touching upon the parcels post, we are reproducing it verbatim:

With respect to the parcels post I respectfully recommend its adoption on all rural delivery routes, and that 11 pounds—the international limit—be made the limit of carriage in such post, and this with a view to its general extension when the income of the post-office will permit it and the postal savings banks shall have been fully established. The same argument is made against the parcels post that was made against the postal savings bank—that it is introducing the government into a business which ought to be conducted by private persons, and is paternalism.

The post-office department has a great plant and a great organization, reaching into the most remote hamlet of the United States, and with its machinery it is able to do a great many things economically that if a new organization were necessary it would be impossible to do without extravagant expenditure. That is the reason why the postal savings bank can be carried on at a small additional cost, and why it is possible to incorporate at a very inconsiderable expense a parcels post in the rural delivery system. A general parcels post will involve a much greater outlay.

It would seem that the N. A. R. D., in its efforts to prevent Congress from establishing any sort of a parcels post, must now reckon with strong opposi-

tion from the White House. Both the president and the Post-office Department are in favor of a parcels post on the rural delivery routes.

* * *

**THE PRESIDENT
ON THE
HEALTH BUREAU.**

We may quote also what the president had to say concerning the much-discussed proposition to establish a bureau of health in Washington:

In my message of last year I recommended the creation of a bureau of health, in which should be embraced all those government agencies outside of the war and navy departments which are now directed toward the preservation of public health or exercise functions germane to that subject. I renew this recommendation. I greatly regret that the agitation in favor of this bureau has aroused a counter-agitation against its creation, on the ground that the establishment of such a bureau is to be in the interest of a particular school of medicine. It seems to me that this assumption is wholly unwarranted, and that those responsible for the government can be trusted to secure in the personnel of the bureau the appointment of representatives of all recognized schools of medicine, and in the management of the bureau entire freedom from narrow prejudice in this regard.

It seems quite probable that in the present short session of Congress little attention will be paid to this matter, but that ultimately a bureau or department of health will be established can scarcely be doubted. The thing for pharmacists to do, as was made clear at the Pittsburg meeting of the N. A. R. D. last September, is not to fight the movement as a whole, but to see that the interests of pharmacy are safeguarded in the proposed bureau.

* * *

**PHARMACOPOEIAL
PUBLICITY.**

An address which Dr. H. W. Wiley delivered at a recent meeting of the Washington City Branch of the A. Ph. A. has attracted a good deal of attention. It was devoted to the subject of pharmacopœial revision, and we were especially interested in what the Doctor had to say on the subject of publicity:

In my opinion the work of revision of the Pharmacopœia will be greatly aided by a frank practice of publicity. Unless it be a matter wholly personal, as for instance a discussion of the capability and industry of those engaged in the active work of revision, there is practically no reason why all the acts of the Executive Committee of Revision and of the board of trustees should not be given wide publicity through medical and pharmaceutical journals and by means of public addresses and discussions. It seems certain that by such means many criticisms and suggestions of great practical utility would be secured. The pulse of each profession would be felt in this way and a closer and more cordial coöperation

of all interested parties secured. No kind of comment, favorable or unfavorable, need be feared, and many faults, of omission and commission, would be avoided. It is far better to have criticisms before the final publication of the text of the book than to wait until it is too late to profit by them. In so far as is compatible with the duties of the office, I shall use my best endeavors to secure judicious publicity relating to this great work.

As president of the pharmacopœial convention for the next ten years, and therefore in a position of authority, Dr. Wiley's utterance on the subject of publicity is of particular significance. There is no doubt in our minds that his position is eminently sound.

* * *

A PRESCRIPTION NO DEFENSE.

On several occasions during the last year we have pointed out in the BULLETIN that a prescription is of itself no defense in the sale of liquor or narcotics. The prescription must be written in good faith by the physician, and it must be dispensed in good faith by the druggist. Several cases where both physicians and druggists have been successfully prosecuted for writing and dispensing prescriptions illegitimately have been reported in our columns. Another case has now come to our attention.

In Washington county, Pa., a druggist and a physician were indicted for conspiring to evade the liquor law by conforming nominally to the requirement that liquor must be sold only on prescription. Judge McIlwaine of the county court charged the jury that it must distinguish between a prescription honestly given by the physician and a prescription written for a fee with the knowledge that the liquor was to be used as an out-and-out beverage. In the one case, said the Judge, the prescription was really such; in the other case it was a mere order such as anybody might write. Furthermore, the druggist, filling such an order, knowing that it was not a legitimate prescription, and was not written by a physician who had the patient under his professional charge, was equally guilty with the physician.

There is little doubt that this is good law, and it is very important just at this time when the tendency is more and more to restrict the sale of narcotics, and also of liquors in dry sections, to physicians' prescriptions. In Michigan, however, the courts seem to have taken the opposite view and to have held that a physician cannot be touched even if he does a frank business in the promiscuous distribution of liquor prescriptions at 25 cents apiece—a

vicious condition of things indeed! Hence the movement of the Michigan Retail Druggists' Association, a new society in the western part of the State, to so amend the law that in dry counties an affidavit sworn to by the purchaser shall be substituted for the physician's prescription now demanded.

* * *

AT LAST!

The California State Board of Health is the first to place syphilis and gonorrhea on the list of reportable diseases. This action was taken in a regulation recently issued, which reads as follows:

Be it resolved, That the California State Board of Health declares that, beginning Jan. 1, 1911, syphilis and gonococcus infections shall be reportable and shall be placed on the list of communicable diseases which local boards of health and health officers are required to report to the secretary, it being provided, however, that until further action by this board, physicians may report the facts concerning these diseases by office numbers instead of names of patients.

Be it further resolved, That this board officially calls the attention of the citizens of California to the contagious and infectious nature of these diseases and requests their co-operation in combating them by every available means—educational, sanitary, medical, social, and moral.

The importance of this step can scarcely be overestimated. It is now known that these diseases are far more wide-spread, and much more disastrous in their consequences, than others which have been the subject of health board supervision for many years. The initial step has been taken by the California Board of Health, and doubtless other State boards will fall in line from time to time. This means much for the future health of the community.

* * *

NEW A. PH. A. OFFICERS.

The election of officers for the American Pharmaceutical Association, carried on as usual through the mails, was finished some time ago and resulted in the following selections for the year 1911-12:

President—John G. Godding, of Boston, Mass.

First Vice-President—Wilhelm Bodemann, of Chicago, Ill.

Second Vice-President—Chas. M. Ford, of Denver, Colo.

Third Vice-President—Ernest Berger, of Tampa, Fla.

Members of the Council—E. G. Eberle, of Dallas, Tex.; Jas. M. Good, of St. Louis, Mo.; Geo. F. Payne, of Atlanta, Ga.

The total number of votes cast was 1238, of

which however 225 were rejected in accordance with a resolution adopted at the last annual meeting that only the votes of those who had paid their annual dues for the year should be counted; 11 of the votes cast were unsigned and could therefore not be admitted.

These officers will be installed at the Boston meeting in August and will serve during the convention year of 1911-12.

* * *

VACCINE— KEEP IT COOL!

During the last few weeks, since the winter season approached, there have been smallpox scares here and there throughout the country with the result that very large quantities of vaccine virus have been employed. In many instances, as usual, complaints have been numerous that some of the commercial vaccines on the market have proved ineffective. Typical "takes" have frequently failed to result. The manufacturers of biological products, several of whom have conducted exhaustive investigations on this point from time to time, have more than once declared and proved, however, that in the great majority of instances the reason why vaccine virus is ineffective is because it has been improperly stored and kept by the druggist. The virus will not stand being overheated, and when kept in a warm place in the pharmacy very rapidly loses its virtue. It should be put in a refrigerator or at least in a cool basement. And it should be ordered in small quantities and often, so as to give assurance of being reasonably fresh. Of course it must be understood that in a considerable number of instances vaccine fails to produce vaccinia because the individual is already immune. Under such circumstances it is the height of injustice to blame the vaccine—the man himself is too healthy!

* * *

TIT FOR TAT.

The physicians are now retaliating. The anti-medical-dispensing crusade of the N. A. R. D. has brought a return fire in at least one section. It is reported in the newspapers that the physicians in the northern part of Hudson county in New Jersey have started a movement to stop counter-prescribing. We find a long editorial on the subject in one of the New York papers in which it is said among other things that "beyond all question the apothecary has always encroached very far upon

the professional field of the physician," and that the movement of the New Jersey physicians "ought to attract wide interest, for the evil that it seeks to uproot exists to a greater or less extent in every county in the United States." It seems that in the State of New Jersey there is a law making counter-prescribing punishable by a fine of \$100 or an imprisonment of six months, with double penalties for succeeding violations. The pharmacists, on the other hand, are fortified by no such laws with respect to medical dispensing, and it would seem as if the physicians had the best of it in any tit-for-tat encounter.

* * *

AFTER LARKIN ET AL.

And now the State pharmacy board in Iowa proposes to bring under the itinerant vender law all concerns like the Larkin Soap Co. which sell drugs and medicines on what is called the "club" plan. The Larkin people declare that they have a right under the interstate commerce law to distribute their wares without being considered venders, and we shall see what we shall see. In the meantime the Iowa board says it will stand by its guns and insist on the payment of the customary \$100 annual license fee.

* * *

Dr. Wiley, in his capacity as president of the pharmacopœial convention, has expressed his opinion that the ninth revision of the Pharmacopœia may be brought out in May of next year. But Dr. Wiley is new to pharmacopœial work, and he may be reckoning without his host. Then, too, the announcement of the Doctor's forthcoming marriage has just been made.

* * *

Despite the fact that the prices of certain medicated plasters have advanced, owing to the increased cost of rubber, some druggists are still maintaining the old retail prices, and are thus really sacrificing their profits. The Philadelphia association is striving to correct this condition of things in its own city.

* * *

Well! well! A druggist down in Ohio, who is incidentally vice-president of a bank, and who was for several years affiliated with a university, is now being prosecuted for selling liquor illegally to some of the students of the university.

EDITORIAL.

THE BULLETIN FOR 1911.

It has been customary for us to have a heart-to-heart talk with our readers at the beginning of every year—to tell them something of our plans for the ensuing twelve months and to invite their coöperation. The time for this chat has rolled around again, and we should like to say something to our subscribers about what we propose to do and also to tell them what, if they feel willing, we should like to have them do. The BULLETIN has always had a great satisfaction in the friendly relations existing between itself and its readers, and most of the success and popularity of the journal we are frank enough to attribute to their assistance.

The BULLETIN has invariably been looked upon as something "different" from the other journals. It is the one periodical in the drug trade which is opened every month with the feeling that it will

PLANS FOR THE YEAR.

contain something novel—something unexpected—something fresh and timely—something that will not be found elsewhere. In a word, it piques interest. Striving to live up to this reputation, we fully expect that during 1911 the BULLETIN will be a livelier, more readable, more helpful, more indispensable publication than ever. It will contain new illustrated features of great interest. It will shortly carry on a new prize contest of a helpful character. It will develop two or three new departments of an exceedingly practical nature. We are now busily engaged in making plans for the new year; we are sending out over 200 letters in search of the most interesting and useful material that we can find; and we give the assurance that during 1911 the BULLETIN will strike a new clip. Watch us!

In the meantime we shall continue and amplify most of the things which have made the journal so popular—the original articles on business subjects, the papers on dispensing pharmacy by practical men, the Dollar Ideas, illustrated window displays, answers to board-of-pharmacy questions, "Best Advertising Schemes," "Exciting Experiences," full-page cartoons of leaders in the trade, descriptions of successful stores, portraits and sketches of prominent men, drug-store fiction and poetry, a snappy digest of news of the month, and interesting and practical material of a hundred and one kinds.

These, we repeat, are some of the things we expect to do—just a few of our plans. Now we

CRITICIZE US!

should like to hear from our readers about the BULLETIN. We don't mean that we want them to write complimentary letters: we get hundreds of these during the course of the year, and we are always proud and happy to receive them. But what we are asking for now are letters of criticism instead of praise. We should like to have you write us frank answers to the following list of questions:

1. What features or department of the BULLETIN do you like best?

2. What things in the BULLETIN do you like the least, and what, if anything, would you be willing to have us throw overboard?

3. What would you like to have us print in the journal that we do not already have—what new things would you suggest?

If our readers will be kind enough to express themselves along these lines we shall be better able to hit off their tastes—to know what they really want—to turn out the kind of a journal they most like. And of course this is exactly the kind of a journal we are anxious to make—we are publishing it to suit our readers, not ourselves, and our greatest desire is to make a touchdown behind this goal.

Another thing: We have already confessed frankly that the class of material which has largely helped to make the journal so popular is that which comes to us from our subscribers themselves.

WHAT WE WANT.

We are proud of the coöperation which we have had from them, and we earnestly solicit its continuance. During the last year or so, however, we have received so much material of certain kinds that we have been compelled to return all new contributions, and we have been afraid that our readers would assume that we were changing our policy and that we no longer cared to hear from them. We have had, for instance, so many illiterate customers' orders, so many dollar ideas, and until recently so many window displays, that we could accept nothing further for the time being in these three directions. This congestion has *not* been true with respect to certain other classes of material, and we now invite contributions along the following lines:

1. Specimen advertisements for reproduction and comment in the department of "Business Hints."

2. Practical and timely communications for our department of "Letters." For this purpose sales ideas, new formulas, and current comment are especially invited. The department of "Letters" last month, for instance, well illustrated the possibilities, and it suggested our ideal for this department—a place where "our readers may exchange opinions and practical suggestions with one another for their mutual interest."

3. In this issue we are using up all of our material for the department of "Best Advertising Schemes," and we invite further contributions. Accepted articles are paid for at the uniform rate of \$2.50 each.

4. We should like to receive portraits and short personal sketches of the officers of drug-clerk associations, with some information as to what these societies are endeavoring to accomplish.

5. We announce herewith a new prize department to be known as "Best Soda Formulas." We solicit original and successful recipes for competition, and we shall pay \$10 for the best formula and \$5 each

**A NEW
PRIZE OFFER.**

for the two next best. A committee of three soda experts will pass on all contributions. The awards will be announced probably in March and the prize-winning formulas will be published either in March or in April. Let us hear from all the soda enthusiasts—the more the merrier.

We have a good many other things that we should like to say—much more that we should like to talk over with our readers at the beginning of this New Year, but we do not want to weary you with shop talk. Perhaps we shall return to the subject a month or two hence. In the meantime we want to assure you again that our great purpose is to turn out such a journal as *you* want—to solicit your constant coöperation—and to cement still further the friendly relations which have always existed between you and ourselves. In the meantime we thank you most heartily for your attitude in the past, and we wish every one of you a happy and a prosperous year throughout 1911!

"606" FOR DOCTORS ONLY.

The discovery of Ehrlich's new remedy for syphilis had hardly been announced when the medical charlatans in New York City began advertising "Treatment with 606." Of all the brazen-faced quackery, this was the worst. "Salvarsan" was

not yet on the market. Aside from a meager supply of the drug furnished by the Rockefeller Institute for experimental purposes only, the product was not available. In fact, it was announced months ago that Ehrlich's "606" would not be sold to the trade until January 1, 1911.

But why concern ourselves with these fake healers, these venereal pseudo-specialists? Because the administration of Ehrlich's remedy calls for a good order of medical intelligence. Only a skilled physician should be permitted to give it. So involved is the technique that there is already talk of establishing specialists who have mastered the process just as we now have men known to be expert in certain genito-urinary operations. In the hands of an amateur the treatment is fraught with danger.

Ehrlich has already announced that the drug must not be given to patients suffering from any diseases of the eye, heart, or kidney. After the injection, he advises that the patient remain in bed, where he can be carefully watched for possible untoward results. For he gives it as his opinion that no agent will ever be found which is powerful enough to destroy the syphilis spirilla without involving at least a chance of hurting the tissues. Swelling at the point of injection, systemic disturbances such as malaise and fever, are some of the things that commonly follow an injection of "606." Apparently the drug is no play-thing.

Furthermore, if the doctor in a desire to be on the safe side gives too small a dose, the results are again serious. That nullifies the whole treatment. The syphilis organisms are then exposed to just enough arsenic to develop their tolerance for the drug without effecting their destruction. Just as the Alpine arsenic eaters by repeated doses of the poison are able to withstand quantities that would kill an ordinary individual, so the syphilis spirilla by contact with weak arsenical solutions come to endure as much of the metal as the tissues themselves. An interesting situation!

One must therefore give the spirochætæ a knock-out dose at the start. This calls for the service of a trained medical man. It is no place for quackery. Already we hear of some relapses in the Ehrlich treatment due, for aught we know, to an insufficient dosage. It is very evident that the use of Ehrlich's remedy must be restricted to trained practitioners.

In all likelihood the "treatment with 606" adver-

tised by the medical quack was nothing more or less than the regular mercurial régime. When the blemishes disappeared, the victims whose bodies had been supposedly sterilized by "606" were free to resume their former habits. Lulled into a false sense of security by a disappearance of the symptoms, but with the germs still lurking in their systems, they might go forth to infect no one knows how many more with the loathsome disease! Meanwhile the charlatan had his dollars. Such cupidity it would be hard to find outside the realm of medical quackery.

TO OUTWIT THE MAIL-ORDER HOUSES.

A big manufacturer of revolvers has worked out a plan to get the best of the mail-order catalogue houses. We refer to the Iver Johnson's Arms & Cycle Works of Fitchburg, Mass. These people say that the manufacturers in the several lines of trade have it in their power to pull the fangs of the mail-order concerns, and this is how they propose to apply the remedy:

In a word, the goods of the house will not be sold direct to such companies, and a scheme has been devised to prevent the companies from getting the goods indirectly. The jobber is placed on a rebate basis very similar to that evolved some years ago by the manufacturers of Cascarets. He pays the long retail price for the goods and he only gets his commission or discount some weeks or months later when he is able to prove that he has furnished no supplies to the mail-order concerns. The retail dealer is likewise prohibited from giving aid and comfort to the enemy or from cutting prices. Both the jobber and the retailer are made licensed agents for the manufacturers, and their contract holds good only so long as the terms of the license are faithfully observed.

More than this, however, the manufacturers propose going direct to the public and explaining the situation in a systematic series of advertisements in the popular journals. The people will be told that the Iver Johnson revolvers will only be sold by licensed dealers; that mail-order houses will not be given licenses; that this system has been found necessary in order "to prevent the substitution of obsolete models, insure the proper treatment of customers, and confine the sale of our revolvers to proper persons." By this plan in all its details the

manufacturers hope to accomplish two things: They expect, in the first place, to earn the support of the rank and file of retailers, because they eliminate both price-cutting and the competition of mail-order houses. In the second place they expect to retain and increase the public demand for their goods by fair treatment and by well-planned advertising campaigns carried on in the popular magazines and papers.

BEATING CONFECTIONERS AT THEIR OWN GAME!

The several articles contributed to the October BULLETIN on the subject of candy, and written for us by successful druggists, were abstracted and commented upon in a recent issue of *The Confectioner and Baker*. Incidentally the journal expressed itself regarding the symposium in a manner which will prove of general interest to our readers:

In reading a symposium on the sale of confections as a side-line by druggists, published in the October number of the BULLETIN OF PHARMACY, of Detroit, much of our wonder ceases as to why some confectionery stores do not thrive in some cities and towns. *They are outdistanced by the finer confections kept in stock and the scrupulously neater arrangement observed by the druggists.* Confectioners naturally lose business whenever they get careless and fail to keep an attractive and up-to-date store, while the druggist, looking at any special side-line as a good winner, seeks to present the freshest and neatest looking line of package goods he can get. There is no excuse for the great difference in the looks and the quality of goods in the two places. But perhaps a reason may be found where one is a careful reader of his trade paper and the other never reads any paper devoted to his interests. The confectioner who keeps abreast of the times is invariably a reader of his trade paper.

Two things will be apparent after reading the foregoing comment: First, it will be seen why some druggists have outdistanced the confectioners themselves in the sale of fine candies, and secondly it will be realized by druggists what they must do if they want to keep ahead in the race.

THE CITY OR THE COUNTRY: WHICH AFFORDS THE BEST OPPORTUNITIES?

J. P. R., of Chicago, writes us the following letter: "Would you kindly inform me through the BULLETIN OF PHARMACY which do you think is the better-paying drug store, the city or country one?"

Give reasons for selecting one or the other, and also the advantages and disadvantages of both. What would be the value of a store doing an average of about \$18 or \$20 per day business, in city and country, and what population would you suggest the country town to have?"

A general letter of this kind is a pretty hard thing to answer without knowing anything of the man himself, his tastes, his abilities, or his capital. In general it might be said that the city affords the best opportunity for the man of brains and ambition, and particularly if he have sufficient capital. Of course it needs a good deal more money to equip a city store properly than would be necessary in a country town. More than this, the profits are smaller and a larger volume of business has to be done. On the other hand, we venture the assertion that the average country druggist is better off financially than his city brother. He hasn't so much money tied up in his store; he doesn't have cut prices to contend with; his expenses are much less; he makes better profits; and his hours of labor are shorter. On a given basis of \$18 or \$20 a day, such as our correspondent mentions, the country town would certainly yield a better profit than the city, and if the proposition is limited to a store of this character, we should be inclined to say that the country is a better place for our friend to start in business.

Do our readers agree with us?

A store of this kind in the country ought to be purchased, we should say, for two or three thousand dollars. In the city it would doubtless cost a little more.

REFILLING NARCOTIC PRESCRIPTIONS.

At the Pittsburg convention of the N. A. R. D. it was suggested by E. F. Heffner, secretary of the Pennsylvania State Association, that a resolution be adopted calling upon the members of the N. A. R. D. to refrain from refilling prescriptions calling for narcotics. Mr. Heffner declared that some time ago the Associated Press had sent broadcast to the newspapers all over the country certain statements regarding a paper of his read before the Pennsylvania Association and discussing the subject of curing the drug habit; that this had caused a number of habitués to write to him for relief; and that many of them in telling how they came to be addicted to the use of narcotics attributed the habit to the fact that

they had had prescriptions frequently refilled which were originally ordered for them by their family physicians.

Mr. Heffner's resolution, however, had hard sledding at Pittsburg. It was discussed quite animatedly one evening at the open meeting of the Committee on Resolutions, but two or three speakers declared that the mere adoption of such a resolution would be tantamount to a confession that it was the custom of the druggist to refill such prescriptions. Rather inconsistently, though, the same men argued that the evil should be corrected by the physicians themselves—that they had power to prevent the refilling of prescriptions by giving directions to this effect to the druggist. The Heffner resolution was finally defeated for this nominal reason—that it was up to the physician to forbid the refilling of prescriptions whenever he deemed such action necessary.

We must confess that we were rather disappointed at the outcome. We know that many druggists already refuse absolutely to repeat narcotic prescriptions, and we believe that humanity would be greatly bettered if this practice were universal among the drug trade. If the N. A. R. D. were to take a definite stand of this kind it would be of great moral value.

SOAP AND THE DRUGGIST.

A convincing illustration of the valuable co-operation which the BULLETIN gets from its readers is seen in the symposium on Soap elsewhere in the present issue. It would be difficult to imagine more helpful and interesting material than this—from the standpoint of the druggist who wants to make a business success and is looking for all the light he can get. Five men have written of their experience behind the soap counter, and they do it with a frankness which suggests a number of congenial druggists sitting down together and exchanging opinions and ideas with one another for their mutual advantage. We should be glad to hear from others who may have additional notions to advance about soaps. "About soaps," did we say? Well, write us about any side-line or feature of your business that you have been particularly successful in exploiting. It is from the man behind the counter, from the man who has himself turned the trick, that we always like to hear.

THE HALL OF FAME.

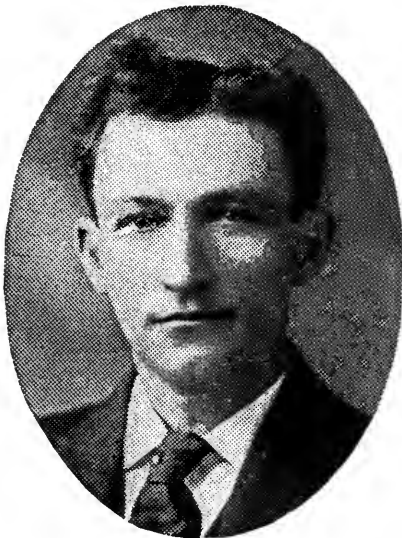
DRUGGISTS IN POLITICS.

Last month we had considerable pleasure in printing eighteen portraits of druggists here and there throughout the country who had been chosen to fill public office of one kind and another at the November elections. On another page in this issue of the BULLETIN we are showing nine other men in the drug trade who were similarly successful in gaining the public trust. Two additional likenesses of political pharmacists are reproduced in this place. The first portrait is that of Chas. N. Clarke, of Hood River, Oregon, who was elected County Judge on the republican ticket. To have some one other than a lawyer chosen to fill a judicial position is indeed a compliment to the man selected.

The second portrait is that of Frank H. Caldwell—another Oregonian. Mr. Caldwell hails from Newberg, is a democrat, and was elected a member of the State Senate to serve his third consecutive



CHAS. N. CLARKE.



FRANK H. CALDWELL.

term in that position. He was originally made a member of the House of Representatives back in 1904, was elevated to the Senate in 1906, and re-elected to the latter position in 1908 and 1910. Incidentally Mr. Caldwell is also a member of the

Oregon Board of Pharmacy. It must be very gratifying to the druggists of Oregon to have a man of this type in the State legislature to see that their interests are properly conserved and promoted.

THE LATE LOUIS DOHME.

Louis Dohme, president of Sharp & Dohme, manufacturing chemists of Baltimore, died on December 12 from neuritis, following an illness of several months. Mr. Dohme was born in Germany in 1837 and was brought to this country when 15 years old by his parents. Entering the retail drug store of A. P. Sharp as an employee, the firm of Sharp & Dohme was established a few years later, and thereupon, chiefly through the aggressiveness



LOUIS DOHME.

of Mr. Dohme, the manufacture of pharmaceuticals was begun on a small scale. Charles E. Dohme, a brother, was taken into partnership in 1866, and from that period on the enterprise grew rapidly until finally the present large establishment was the result. Mr. Dohme was graduated in 1856 from the Maryland College of Pharmacy and was president of this institution for a considerable number of years. A bachelor, he lived with his brother, Charles E. Dohme, at the latter's handsome residence in Baltimore, and he was a prominent member of organizations like the Germania Club and the Baltimore Country Club. Of late years he had withdrawn more or less from active business, had taken frequent trips abroad, and had gratified his love of art and music.

A HIGH-SALARIED MAN.

At the last annual meeting of the United Drug Co. in Boston, some reference to which was made in the BULLETIN at the time, President Louis K. Liggett explained to his stockholders all the ins and outs of the Riker-Liggett litigation during the past year, and went also into the history of the Riker-Hegeman combination which was originally expected to involve the thirty or more stores owned by the Louis K. Liggett Co. Desiring to have the members of the United Drug Co. know the facts about everything which had transpired since the last meeting, Mr. Liggett expressed his willingness to answer questions that might be put to him and incidentally declared that only a few days previous



LOUIS K. LIGGETT.

a stockholder had written and asked him what his salary was as president of the company.

He thereupon explained that his present salary was \$10,000, at which a stockholder on the floor called out, "That is not enough"—a statement which caused everybody to burst into laughter and applause. Mr. Liggett said that when the company was first organized the salary of the president was \$4000, afterwards it was raised to \$6000, and finally it was increased to \$10,000 as the business developed.

It is well known that Mr. Liggett is either the president or leading spirit of a number of auxiliary corporations, and in just how many of these he receives additional salaries we are not in a position to state. Neither do we know what his earnings are from the Louis K. Liggett group of stores. That he is, however, an able man, and that he is worth all he gets, is evidently believed by the stock-

holders of those companies which he has organized and conducted successfully. These are certainly large days in the drug trade if the opportunities are grasped.

TWO RETIRING MEMBERS OF THE EXECUTIVE COMMITTEE OF THE N. A. R. D.

For two or three years prior to the Pittsburg convention of the N. A. R. D., and possibly for a



W. S. ELKIN, JR.

period even longer than that, W. S. Elkin, Jr., and Edward Williams were members of the National Executive Committee. They were both excellent



EDWARD WILLIAMS.

men in that position—sane, conservative, and absolutely loyal to the interests of the organization. At the Pittsburg convention, however, both men announced that it would be utterly impossible for them

to go back on the committee, Mr. Elkin because of increased business cares, and Mr. Williams because he had been made secretary of the Wisconsin Board of Pharmacy and had certain other irons in the fire which consumed much of his time and energy. There was a disposition at Pittsburg not to let these two good men go, but their wishes were finally respected. Chairman Charles F. Mann, of Detroit, also felt that he had done his whole duty after six or seven years of steady work in official harness, but the Nominating Committee and the convention refused to let him off.

A SUCCESSFUL MISSOURIAN.

We are incorporating in this paragraph the portrait of W. C. Bender of St. Joseph, Mo., who is president this year of the Missouri Pharmaceutical Association. Mr. Bender is also president of the Retail Druggists' Association of St. Joseph, his home town, and in the third place he is a member of the State Board of Pharmacy. Evidently the druggists of Missouri think well of Mr. Bender! He was born in St. Joseph in 1872 and has been in business for himself fourteen years. He conducts



W. C. BENDER.

an ethical pharmacy, and we have before us as we write a public announcement in which he prints the statement that he neither makes nor recommends any patent medicine, but advises his patrons to consult a regular physician. Mr. Bender's particular desire is to build up a successful prescription business and he has evidently made good at it. Incidentally it may be said that he is a member both of the A. Ph. A. and the N. A. R. D.

THE NEW PRESIDENT OF THE JOBBERS.

The election of Dr. William Jay Schieffelin as president of the National Wholesale Druggists' Association, at the Dallas meeting in November, was a worthy tribute to one of the finest characters in the American drug trade. A product of both American and foreign universities, Dr. Schieffelin is a man of broad educational attainments, and he is not only a conspicuous figure in the drug trade



WM. JAY SCHIEFFELIN.

and in chemical circles, but has taken an active and leading part in various civic, philanthropic and religious movements. He is a citizen in a broad sense of the term. A man of polish, culture, wealth, social standing and practical ability, he will preside over the N. W. D. A. during the coming year with a good deal of force and dignity. It will be recalled that he was elected a member of the U. S. P. Board of Trustees at the pharmacopoeial convention in Washington last May.

Two of the largest department stores in Philadelphia have announced that they will give patrons the privilege of calling them on the telephone without cost. This means, when the slot 'phone of the druggist is used, that the charge is made by the telephone company to the department store instead of the customer making the call, and the druggist therefore loses his commission on the business. Fearing that this free movement may spread, the P. A. R. D. is striving hard to put a prompt check to it.



Carl W. Brenner, Stillwater, Minn., elected mayor of the city.



Lawrence J. Dugan, Webster, Mass., representative in the State Legislature.



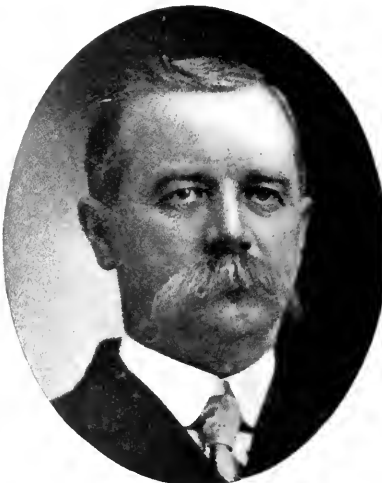
Stanley J. Kuslewski, Chicago, Democrat, one of the commissioners of Cook County.



V. C. Armes, mayor of Gowanda, N. Y.



John E. Andrus, Yonkers, N. Y., re-elected to the National House of Representatives.



Dr. H. A. Weymouth, Saco, Maine, representative in the State Legislature.



Thomas W. White, Newton Upper Falls, Mass., representative in the State Legislature.

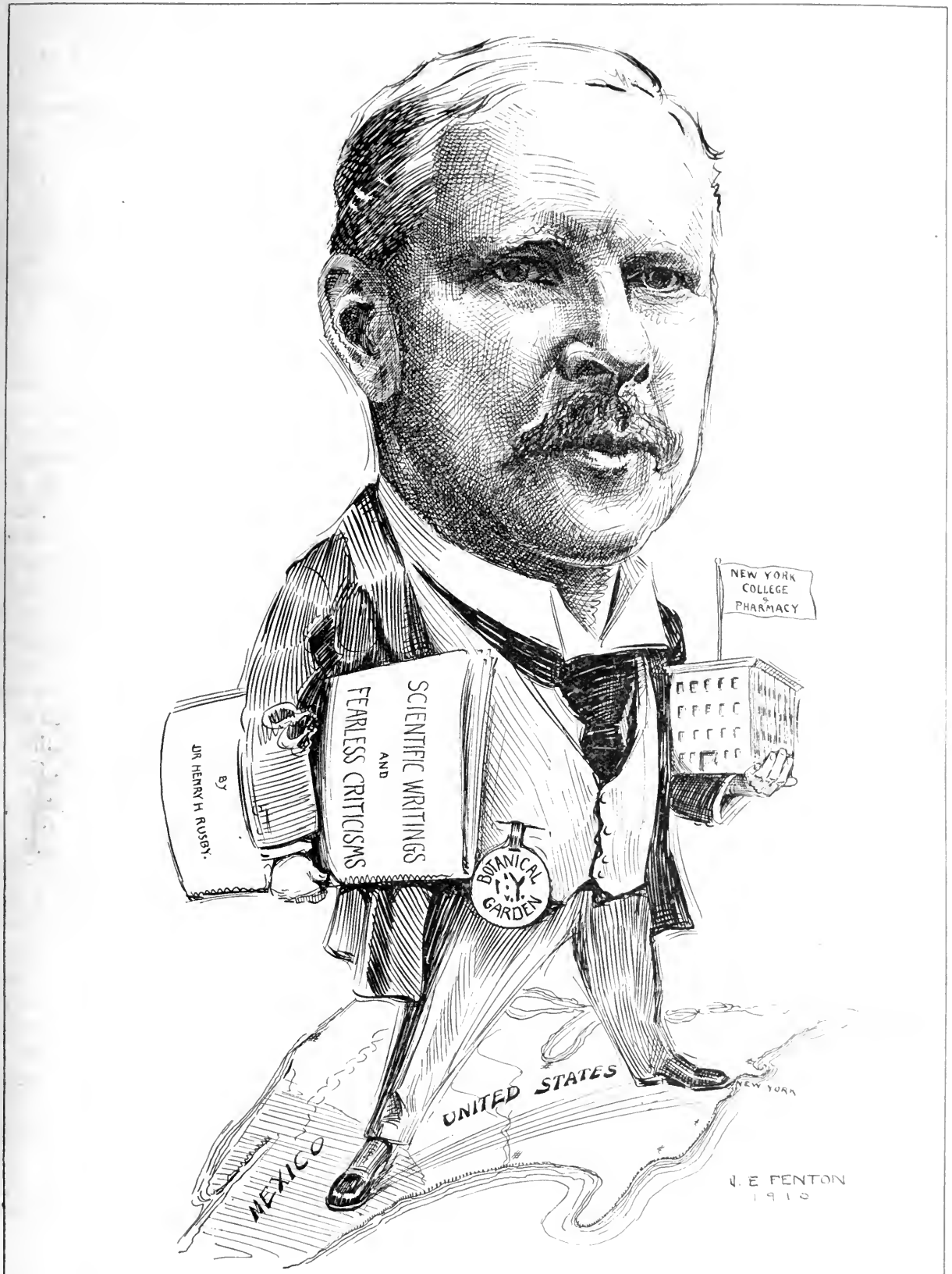


E. H. Dort, Auburn, Neb., Republican member of the State Legislature.



Wm. Forrester Town, member of the City Council of Mansfield, La.

Druggists Elected to Public Office.



The Atlas of Pharmacy—Dr. Henry H. Rusby, of New York City.

THE PHARMACY AND THERAPEUTICS OF "606."

Ehrlich's New Remedy for Syphilis—How to Dispense It—Precautions to be Observed—The Marvelous Curative Properties of the Drug—By a Pharmacist Who Has Repeatedly Prepared the Mixtures for Physicians.

By H. A. B. DUNNING.

As is generally known the title "606" was given to the substance under discussion because it was the six-hundred-and-sixth preparation experimented with by Ehrlich and his associates in their attempt to discover a specific for certain parasitic organisms, which would be relatively non-toxic to the human system.

This particular substance was prepared by Bertheim in conformity with the theories of Ehrlich. It was first used by Hata, Ehrlich's associate, in his

early reports entirely confirmed the conclusion drawn from Hata's experiments on animals.

GATHERING CLINICAL DATA.

For the purpose of obtaining data of the most comprehensive character and to guard against the misuse of the substance, Ehrlich formulated a plan of investigative experimentation such as has never been known. A limited supply of the material was furnished many medical institutions and in some instances individual expert investigators, throughout the world, the only stipulation being that the experiments should be carried out along the lines suggested by Ehrlich and that typical cases should be selected for treatment. No charge was made for the drug, but it was stipulated that the results should be reported to Ehrlich.

Thousands of doses have been furnished without charge and some eight thousand have been reported upon by medical men from all parts of the world, naturally the larger number coming from Germany. As a specific for syphilis, the status of the new discovery is still in doubt. Early reports told of marvelous cures of nearly all types of syphilis, without any untoward results. These were followed with somewhat conflicting stories until at the present time the most that can be stated is that after an injection of "606" with suitable dosage and under proper conditions, in the large majority of cases, the organism disappears from the serum of lesions within 24 to 48 hours. The Wassermann reaction for the presence of syphilitic toxins in the blood becomes at least temporarily negative. Lesions are in nearly all cases greatly improved in a few days and are entirely eradicated within a few weeks.

Fatal results have been few and in most cases seem not to have been due to "606" directly. The most important question as regards the efficacy of "606" as a permanent cure for syphilis is the matter of recurrence. Although spirochætæ disappear,



H. A. B. DUNNING.

experiments on animals infected with the spirillum of recurring fever, while others tried it upon the organism of syphilis. These experiments tended to show that a single dose of "606" destroyed within the body of the rabbit all spirochætæ, the parasite of syphilis, within one or two days and promoted the rapid healing and final disappearance of open sores within a few weeks.

At Ehrlich's request a number of eminent medical investigators made tests of the new remedy on human subjects and reported the results. These

lesions heal, and the Wassermann test becomes negative, some of the best men report recurrence within a few weeks or months.

Whether recurrence will be so limited that the general value of the remedy will not be greatly lessened, or there will be some new method of use discovered which will prevent it, only the future can determine. There seems to be a general consensus of opinion that the remedy will be of tremendous value in the cure of syphilis either in all types or at least in some, particularly in conjunction with the use of mercury.

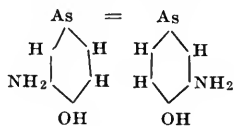
SOME PERSONAL OBSERVATIONS.

Personally I have seen eight cases treated with this remedy, having prepared the material for injection. In only one case was there any local disturbance of any importance at the seat of injection. And none of the patients showed alarming symptoms. In each case organisms disappeared within a few days, lesions either entirely healed or cleared up greatly within ten days to two weeks, the Wassermann reaction becoming negative.

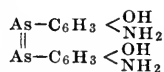
In a few words the effects produced by injecting these eight doses of "606," by the suspension method, which I will describe further on, have been marvelous. The cases will of course be reported in full by the several medical men for whom I prepared the material for injection.

THE CHEMISTRY OF THE DRUG.

In regard to the chemistry of "606," it is an organic arsenic compound containing about 40 per cent of arsenic. Its full chemical name is *1 arseno, 3 diamino, 4 dihydroxy benzene*. The more common chemical title is dioxydiaminoarsenobenzol. Written graphically the chemical formula is:



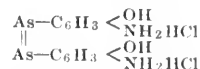
Or it may be written:



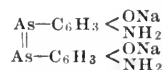
As will be noted the compound contains two phenol groups which impart to it a weak acid character, while the arseno-amino groups give to it weak basic properties. It may act either as a base, combining with acids to form salts, or as an acid, combining with alkali to form salts.

Inasmuch as dioxydiaminoarsenobenzol is an un-

stable compound, the preparation is marketed as the "bichloride,"



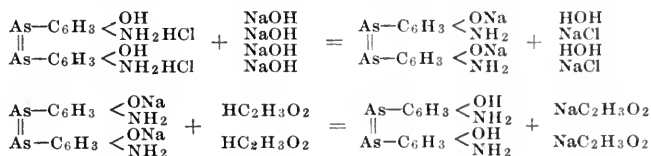
in sealed glass tubes. This salt, however, is not suitable for injection on account of the fact that in contact with water it quickly hydrolyzes, thereby liberating hydrochloric acid, which would cause the injection to be exceedingly painful. Because of this fact either the sodium salt,



is injected or the base, the formula given above.

It might be noted here that the injection of the sodium salt is also painful, for like the "bichloride" the combination is so weak that hydrolyzation occurs in presence of water and NaOH is liberated.

The quantitative reactions involved in preparation of "606" for injection as base are:



438 Gm. "606" require 160 Gm. NaOH to form bisodium salt.
0.1 (one decigram) requires 0.0368 NaOH to form bisodium salt.

0.6 (average dose) requires 0.2208 NaOH to form bisodium salt.

0.6 ("606") yields 0.156 NaCl when bisodium salt is formed.

0.6 ("606") requires only .108 NaOH to neutralize HCl and liberate base.

0.108 NaOH is equivalent of 2.8 N/1 NaOH or .7 4/N NaOH.

0.1 "606" forms .093 bisodium salt.

0.6 "606" requires of glacial acetic acid .162 to liberate base from bisodium salt.

0.222 sodium acetate.

0.7404 sodium acetate will be administered if .6 "606" be dissolved in 3 Cc. 15 p. c. NaOH solution (this is amount suggested by Ehrlich).

One of the most confusing circumstances regarding "606" has been the numerous methods and change of methods for preparing the material for injection. According to many of those who have experimented with "606," particularly in America, among the most important considerations is the careful technique required. Here is where the pharmacists come in, and is the *raison d'être* for this article. From an article by Henry S. Elsner, M.D., Professor of Medicine, Syracuse University, in Dec. 10, 1910, *American Medical Journal*, the following passages are quoted:

"One would naturally suppose that it is easy to prepare the remedy for either intramuscular or intravenous injection. I myself shared this opinion with others who had never seen it used. Before Ehrlich sent me the remedy, after I wrote him I was soon to leave Germany, he wisely suggested that because of the great difficulties of preparation, those who were to use it might with profit visit some one of the leading centers of Germany where there was a large amount of clinical material for the purpose of learning the method of its mixture, and the injection technique."

Also a column further on in the same article:

"I must repeat the warning of Ehrlich, unless the method of preparation of the remedy is to be materially simplified in the future no one should undertake its introduction into the body without first seeing the experienced mix and use it. I have seen Wechselmann's assistant work almost an hour before his mixture was neutral."

It is not necessary to discuss the great variety of methods suggested and used by various investigators, for although not wishing to be overcritical, some of them are without doubt startlingly crude.

As was previously stated the substance may not be injected as the "bichloride" in watery solutions or mixtures.

PREPARING THE INJECTION.

At the present time there are three distinct methods and many variations of these for preparing the material for injection.

The essential features of the Alt method or alkaline solution method is as follows: The "bichloride" is partly dissolved in five or ten Cc. of water and N/1 NaOH solution is added until the precipitate first formed is just or not quite brought into solution; this is then diluted to 15 or 20 Cc.

The intravenous method is given in Elsner's article as follows:

"Into a graduate holding 250 Cc. drop 10-20 Cc. of sterilized water. Add the required dose of "606" and mix thoroughly until there is a clear solution; add sterile water, or better, normal salt solution, to the 100 Cc. mark; then add pro 0.1 of "606" 0.7 of normal sodium hydroxide and mix thoroughly until the precipitate is thoroughly redissolved. If after thorough mixture the solution is not clear add a few drops of the sodium hydroxide solution to produce this, and then add sufficient normal salt solution to make 200-250 Cc. The fluids used are all to be warmed. The alkaline mixture is then ready for injection."

The neutral suspension method consists in dissolving the "606" in a strong solution of sodium hydroxide, reprecipitated with glacial acetic acid, rubbing precipitate until finely divided, diluting with water, and finally neutralizing with weak acid or alkali, whichever is required. It is this method which I will describe in full further on.

The alkaline solution method is only less painful than injection of aqueous solution of the "bichloride." While the neutral suspension method is the most satisfactory in regard to any by-effects, there are frequently, usually on account of bad technique, I believe, serious local disturbances.

While the intravenous method seems to be the most rational on account of the intention of overwhelming all the spirochætae immediately, and that, with proper technique, there are no local disturbances, the by-effects are more serious.

In regard to the best method of the three noted, I will but state that I leave that entirely to the judgment of the individual physician.

PREPARING THE NEUTRAL SUSPENSION.

The following method for preparing the neutral suspension is a modification of that suggested by Ehrlich and is given in the most minute detail, which I feel certain will call forth appreciation from the pharmacist who is required to prepare a dose of "606," although he may consider the directions somewhat long and tiresome:

Select a one-ounce porcelain evaporating dish with sloping sides, and also the bottom of a one-ounce tin ointment box in which the dish will rest to prevent tipping.

Prepare a glass pestle $2\frac{1}{2}$ inches long and $\frac{1}{2}$ inch in diameter by marking with a file a glass rod and breaking off a piece of the dimensions cited; roughen the rounded end of rod by means of file. Fill four glass stop-cock burettes with the following solutions: four normal sodium hydroxide, glacial acetic acid, decinormal solution sodium hydroxide, decinormal solution acetic acid; the latter two solutions and the burettes should be sterilized. A dozen or more pieces of blue litmus should be sensitized by passing gaseous ammonia through bottle or test tube containing them.

The same quantity of red litmus prepared by holding opened bottle of concentrated hydrochloric acid near mouth of tube containing the litmus paper.

A four-ounce Erlenmeyer flask is filled with distilled water, stoppered with cotton and sterilized.

The porcelain dish, tin bottom, glass pestle, litmus paper, eye dropper or pipettes are wrapped in gauze

and placed in an Arnold sterilizer and sterilized for an hour or more.

It has been my practice to take the sterile material and apparatus and prepare the dose at the time when and place where injected, otherwise a half or one-ounce glass-stoppered bottle must be included in the apparatus sterilized.

When ready to prepare the dose, the sealed tube containing "606" is marked with file with intention of making as large an opening as is wise, inasmuch as the powder is of such character that it is not readily shaken out of tube when the opening is small. The use of a sterilized platinum wire is very helpful.

The yellow soap-like powder is emptied into the sterilized porcelain dish containing the pestle, and the dish supported in the tin bottom is gently tapped to get all the powder down to the bottom.

I neglected to state that it is advisable to sterilize the hands by immersion in bichloride solution previous to handling the sterilized dish or pestle.

For each one decigram of powder 0.33 Cc. of four normal sodium hydroxide is let into dish from the burette. This mixture is stirred with a pestle until a perfect solution results. This operation should be accomplished without distributing the solution over any greater surface than is necessary.

To the solution is added for each one decigram of powder 0.05 Cc. (five hundredths Cc.) of glacial acetic acid.

NEUTRALIZING.

It is most important that the resulting mixture should be triturated until every particle is finely subdivided; it should require at least one-half hour to accomplish this; then enough sterile water is added to bring the bulk of mixture to 10 Cc., or 15 if desired. The mixture is now tested with the sterilized litmus by wetting (using pestle) a very small spot on a strip of the litmus paper with as little of the mixture as possible and examining the opposite side for color.

If the mixture is not neutral, it will be very near neutral. Then add enough of one or the other decinormal solutions to make the reaction neutral. While there is no statement to that effect in any of the literature concerning "606" which I have seen, the freshly precipitated base in aqueous mixture is without doubt amphoteric, and it is very important to remember this and observe particularly whether the finished mixture colors blue litmus faintly red rather than the action on red litmus. It is best that the mixture be slightly alkaline to red litmus and be

certain that it is not at all acid to blue. If the mixture is to be transferred to sterilized bottle then some of the sterile water used to dilute concentrated mixture should be reserved to wash the residue from porcelain dish into the bottle.

The mixture is now ready for injection. It will I believe be interesting and I hope instructive to note some of my experiments for the purpose of bringing the neutral base into solution.

A portion of a carefully neutralized suspension was collected on the filter, washed well and quickly by means of a filter pump, and then removed and rapidly dried on porous plate; the material was not soluble to any extent in petroleum oil, or olive oil, somewhat soluble in castor oil, more soluble in castor oil, alcohol and olive oil. The neutral base could not be shaken out with carbon tetrachloride, ether or chloroform. The intention to prepare a satisfactory oily solution was given up as impracticable. Some of the base collected and dried on porous plate made good suspension with paraffin oil. Fifty per cent glycerin suspension showed little sign of oxidation when kept in hermetically sealed tubes.

The bichloride is readily soluble in glycerin. The base precipitated from glycerin solution is in a very fine state of subdivision; only sufficient four normal sodium hydroxide being added to neutralize the hydrochloric acid of the "bichloride."

PREPARING THE ALKALINE SOLUTION.

The alkaline solution to be injected intramuscularly or subcutaneously is best prepared in this way: The following apparatus is carefully sterilized: several pieces of gauze of the size of a handkerchief and folded, absorbent cotton size of an orange, two glass rods, two 2-ounce beakers, one 4-ounce porcelain dish, one 1-ounce glass funnel, 25-Cc. glass stop-cock burette, preferably with upper half taken off for convenience in sterilizing. Also sterilized water, N/10 acetic or N/10 hydrochloric acid.

One of the beakers is wiped dry with sterile gauze. No part of the hands should touch the inside of the beaker even if they have previously been treated with "bichloride." Salvarsan, "606," is emptied into it, the beaker being gently tapped for the purpose of collecting powder in the bottom and on one side of beaker; 1.4 Cc. of 4/N NaOH is added and the mixture stirred. Avoid spreading, until perfect solution results; the beaker should be held over a sterilized porcelain dish while effecting solution. This solution is now diluted with 15 Cc.

sterile water and then enough sterile N/10 acid is added to produce slight opalescence. In my opinion, and this is my procedure, this solution should be filtered several times through a tight pledget of sterile cotton placed in a sterile funnel, until all specks and fibers are removed. The cotton is then washed with sterile water drop by drop to remove all solution of salvarsan. An extra beaker is among the apparatus sterilized for the purpose of receiving the filtrate. The solution after stirring is now ready for injection.

PREPARING SOLUTION FOR INTRAVENOUS INJECTION.

The preparation of the solution for the intravenous injection is somewhat similar to the method suggested for the alkaline solution. The sterile apparatus required is a one-pint florence flask, two 2-ounce beakers, a 4-ounce porcelain dish, a 1-ounce funnel, cotton, two glass rods, two burettes of 25-Cc., each provided with a glass stop-cock, sterilized N/10 HCl, N/10 NaOH, and physiological normal salt solution 400 Cc. repeatedly filtered; 0.6 salvarsan is emptied into a beaker, held over a porcelain dish; the powder is collected in the bottom of the beaker as in the alkaline solution method. 1.4 Cc. 4/N NaOH are now added and solution is effected as stated above; 30 Cc. of sterile filtered normal salt solution are added and the resulting solution is then filtered through a pledget of sterile cotton as before into the extra

beaker, the same care being used to remove extraneous matter and to wash the cotton. This perfectly clear solution is poured into sterile flask and the beaker well washed, the washings being poured into the flask. Enough sterile filtered normal salt is now added to make the volume measure 250 to 300 Cc. After mixing, sufficient N/10 HCl, sterilized, is added to produce incipient opalescence and then a drop or two of sterilized N/10 NaOH to clear away the opalescence.

The solution is now ready for injection, and in the best condition. 1.4 Cc. of 4/N NaOH are now added and the solution is effected as stated in the foregoing; 30 Cc. sterile normal salt are added and the solution is then filtered through a pledget of cotton as before, into a sterilized pint florence flask. It is then filtered back into beaker and again into flask until perfectly clear and free from extraneous matter.

At the present time the dose of "606" for adults ranges from 5 to 8 decigrams, while the toxic dose is more than 5 grammes.

The substance may be purchased from Victor Koechl & Co., of New York, about the first of the year, according to a letter received by me from that firm.

"606" will be marketed as Salvarsan. The price will be: 0.6-gramme tubes, \$2 net for wholesale and \$2.50 for retail druggists; and \$3.50 to physicians.

THE DRUGGIST AND THE FOOTPAD.

"Hist," cried the stealthy footpad, as he knocked the druggist down;

"Deliver up your wad at once, before I crack your crown!
You need not say you have no mon—I've watched an hour or more,

And fifty people passed within, and then came out your door!"

"Alas! sir," wailed the druggist, as he rose with features pale,

"I pray you, Mister Footpad, kindly listen to my tale:
Full well I know that people do go in and out my place,
But some come in for postage-stamps, and some come in to face

The mirror and adjust their hats, or borrow pen and ink,
And some come in to ask the time and some come in to think.
And some come in to meet their friends, and some their friends to bring

To ask me for an almanac, or else a piece of string.
And some come in to question where a certain car to catch,
While more come in to telephone or ask me for a match;
And some to look up something in the street directo-ree,

And some have nerve enough to try to borrow dough of me.
And some come in to sit an hour and hand out sage advice
On how to run a drug store and treat the people nice.

And some come in to rip me up and some to rip me down
Because I closed at twelve one night when they stayed late
in town.

And some come in to tell a joke that I have heard before,
And then because I don't 'ha-ha' they go away dead sore.
And some come in to change a bill and then go out again,
While some come in to warm themselves or get out of the rain.

And some——"

"Enough! Enough!" the robber said. "Yours is an awful calling,

My life of crime has never met a story so appalling.
Forgive that lump upon your head made by my club descending,

And take my purse—I feel condemned to think I came near ending

The life of one whose only work is every one befriending."

—*Rawlin's Drug News.*

FIVE DRUGGISTS DISCUSS SOAPS.

They Tell How They Buy Them, What They Carry, What Profit They Make, Which Goods Sell the Best, and How They Advertise and Push the Line.

Soaps of all kinds, toilet, medicinal and otherwise, comprise one of the most important side-lines in the drug store, and for several months we have desired to print some live, practical material on the subject in the BULLETIN. We finally addressed a list of questions to four pharmacists whom we knew had been unusually successful in developing this feature of their business, and their responses are full of "meat." Good buying and selling ideas stick out in nearly every paragraph. If other druggists feel prompted to give their experience with the soap line we should be glad to hear from them; this is a subject on which practically nothing has been printed in the drug journals, and we feel sure we have opened a helpful lead.—THE EDITORS.

By **HENRY D. HUGGAN**,
Boston, Mass.

I buy soaps in large quantities from the manufacturers when they make the price an object; and I



HENRY D. HUGGAN.

take especial interest in pushing brands that are of good quality, price-protected, and give a fair profit.

I carry in stock now several hundred dollars' worth of soaps, and average about 25 per cent profit on them. I think this is one of the best lines of goods in a drug store, for there is little, if any, loss from shrinkage or handling.

It is not always easy to distinguish between medicated and toilet soaps, for the pure and simple

Castile soap, for instance, is considered by many a highly medicated and beneficial skin soap. This soap is in large demand by our trade and earnestly recommended by our staff of assistants, therefore we carry a good line of imported and mottled Castile soaps. Perfumed toilet soaps, of course, are in greater demand than any other, while the strictly medicinal soaps are called for much in the same proportion as cough remedies and throat lozenges. Toilet soaps are used practically by every one, while medicated soaps are called for only when a physician prescribes them, or when necessity requires them.

BRANDS CARRIED.

The Colgate line of toilet soaps we take especial interest in, for its manufacturers are always alert to see that a square deal is given to the retailer. The Hudnut house is also favored by us, for they put out fine goods and regulate the prices as well. The Roger & Gallet line is also a good seller and gives satisfaction to the average purchaser. The above three lead in sales, but in addition we have quite a demand for Williams' Toilet Soap, Pears', 4711, Societe Hygienique, Piver's, Violette, Robinson's, Armour's and several others. Among the medicated soaps, we find that Stiefels' leads in sales.

We use all fair means within our power to increase our sales of soaps. We give a show-case ten feet long to the toilet soaps and another equally as large to the medicated soaps. In addition we display them in our windows frequently, and at times on the top of our show-cases. In this way we keep them always before our customers and think that we benefit very much by so doing.

MAILINGS OF SOAP CIRCULARS.

At different times of the year we put circulars into the packages that go out of our store, giving a list and prices of all our soaps. In this way the families are reached by our advertising matter and become acquainted with the different lines we carry. Situated as we are, we think that this is the most economical and effective way of keeping ourselves before the public and making known to them just what we have to offer.

As a last remark permit me to say that I believe the soaps that are destined to become the most popular, best, fastest sellers, and the most profitable to handle, will be those that are pure, finely milled, delicately and beautifully perfumed, attractively and neatly wrapped and price-protected. Human nature, you know, is about the same everywhere, and these qualities appeal to everybody.

By **HENRY W. MERRITT**,
Plains, Pa.

It is with pleasure that we write, as requested, brief answers to the questions that have been propounded by your enterprising editor regarding soap. We have been much interested in this subject. Determined to secure our just share of the soap business of this vicinity, we have kept up an earnest campaign and put not a little energy back of this department. Despite the very rapid growth of the soap clubs and the increased number of money orders sent to mail-order houses from this town, we have nearly quadrupled our soap business and multiplied our profits many times that amount during the past three years.

One of the most successful special sales that we ever held was one of soap. It was during this sale that we demonstrated the fact that it is not always necessary to cut the price down below cost to attract attention and make sales. We purchased a job lot of unwrapped glycerin soap, intending to place it on sale at 5 cents a cake.

PUTTING THE PRICE UP—NOT DOWN.

When the goods arrived we decided to try cutting the price up instead of down and accordingly marked it 7 cents or 4 cakes for a quarter. You should have seen the lot disappear. All was gone in less than a day, and for several weeks we had calls for that seven-cent soap.

Our soaps are purchased mostly from manufac-

turers and in sufficient quantities to secure the best possible prices. As members of the A. D. S. we make full use of our coöperative buying privileges.

We aim to keep a line of toilet and medicinal soaps complete enough to supply the demands of our community. We push only those on which we make a profit of not less than 100 per cent and make every reasonable effort to prevent a sale of an over-priced article.

Toilet soaps are the best sellers. The A. D. S. line gives me the best profit, netting nearly 140 per cent. This is also true of their medicated soaps. For example, their Vitaskin medicated soap costs us \$1.25 a dozen and we sell it at 25 cents a cake,



HENRY W. MERRITT.

making a profit of 140 per cent. On the A. D. S. line there is no soap club, department store nor mail-order competition. That it gives satisfaction to our customers is proven by our increased sales.

RESORT TO DISPLAYS AND MAILING LISTS.

We devote the base of one case to soap and occasionally use the top of the fixture and extra tables for special exhibits. We make a window display of soap about twice a year.

We have a mailing list which includes the names of nearly every housekeeper in this region, and we make use of this list for circularizing whenever we have anything special or new in our soap department. Regularly every spring we send out a letter calling attention to our line of soaps.

By **GRANT W. STEVENS,**

Detroit, Mich.

Soaps as a side-line have proven very satisfactory and profitable to me. I have featured them strongly in my present location, especially the cheaper and bargain grades.

Several window displays of a 10-cents-per-box



GRANT W. STEVENS.

soap has given me very gratifying results. I have bought from different manufacturers, but have had the best success with an assortment purchased from Kirk Co. at \$3.60 per gross in 5-gross lots. By making attractive window and counter displays I have disposed of $3\frac{1}{2}$ to 4 gross in one week and at a profit of $33\frac{1}{3}$ per cent.

The next best success I have had is with a mammoth transparent glycerin soap selling at 5 cents a cake or 20 cakes for \$1.00, with an occasional sale of 20 cakes. In displaying this soap, I place a flashlight on the floor of the window and pile the whole 5 gross over and around the flashlight. Hardly a person passes but who is attracted by this display, especially at night when the flashlight is working. This line also affords a profit of $33\frac{1}{3}$ per cent.

THE DISPLAY OF SOAPS.

I use a six-foot silent salesman show-case exclusively for the display of toilet and medicinal soaps. I never exhibit or offer any soap for less than 10 cents a cake except when I run these special sales.

For general purposes, I have been most successful with Colgate & Co.'s line ranging in price from 5 to

50 cents a cake. They need little or no introduction, and in taking advantage of their special offers their line affords a profit of from $33\frac{1}{3}$ to 70 per cent. And if one takes advantage of their extra special prices in large quantities, there is even 100 per cent or better in it.

My sales of the medicinal soaps have been somewhat limited, except of the brands which afford little or no profit. I have never used any method of advertising soap beyond window and counter displays.

By **JAMES F. FINNERAN,**

Boston, Mass.

We buy our soaps as far as possible from the manufacturers in quantities of five-gross lots, our purpose being to get the manufacturers' minimum price, which is usually based on that quantity. This, of course, does not apply to the slow-selling medicated and toilet soaps, which seem to be unlimited in number.

We carry at least three hundred kinds of soap, and we do find the line worth pushing. The profit



JAMES F. FINNERAN.

on them will average from 25 per cent upwards on the French soaps of moderate and high price, and at least 50 per cent on the lower grade of soaps retailing at 10 or 15 cents a cake.

While we carry quite a number of 5-cent soaps we keep them, as much as possible, in the background, believing that, in our store at least, it is much more

profitable to sell a 10-cent cake or three for 25 cents. And incidentally it takes no more time to talk up the 10-cent one than it does to sell the five. The percentage of profit is invariably larger, and, of course, the amount of profit is correspondingly larger.

The sale on strictly medicated soaps is limited, but the toilet soaps, in neat and attractive wrappers and boxes, have enormous sale.

VARIETY NECESSARY.

As for the brands, our customers are always looking for something new in toilet soaps, and we find it necessary to continually buy new brands of soaps in order to supply that demand.

We have a very large sale on domestic Castile (?) soap, which we buy in a 36-pound case of nine 4-pound bars, or the same soap cut into half cakes which we sell at 10 cents—three for a quarter. This soap we feature in the window, putting in the original rough case as received from the factory, showing the soap in green, white and mottled; both cut and in bars.

We have sold in ten days over a ton of this soap, and this has been duplicated two or three times during the year. It is needless to say that this soap must give satisfaction or we could not sell the quantity. It has a continual sale year in and year out even when not in the window.

ADVERTISING METHODS.

We make complete window displays of Castile soaps alone and also window displays of toilet soaps alone which greatly increase the sale at time of display. We also have one large show-case devoted to toilet soaps alone, and also have displayed in prominent places on our show-cases and counters always a variety of toilet and Castile soaps.

We very seldom advertise soaps in any way except by display because we believe it is necessary to get the customers' attention at the time of sale rather than to try to interest them through newspapers or circulars. I think it is safe to say that it is a waste of money, from our experience, for a druggist to use newspaper space in advertising soaps of any kind.

By JOHN C. WALLACE,

New Castle, Pa.

Domestic soaps that we sell in any quantity we buy direct from the manufacturers, imported soaps from their American representatives, and the soaps, both medicated and toilet, on which we have a limited sale we buy from the jobbers.

For a number of years we carried Stiefel's Medicated Soaps, but we are now giving more attention to Johnson & Johnson's line, which gives entire



JOHN C. WALLACE.

satisfaction. In addition to Stiefel's and the Johnson & Johnson lines we have in stock 41 different medicated soaps.

In toilet soaps we carry Pears', R. & G. Violet, Société Hygienique, together with a complete line of Colgate's. Soaps average about 50 per cent profit and are all worth pushing.

We sell about twice as many toilet as medicated soaps. We have not, however, made any special effort with the soap line beyond a good display in twelve feet of casing and an occasional window display.



“MY BEST ADVERTISING SCHEME.”

An Ingenious Method of Exploiting Cough Syrup: Goldfish as Premiums with Each Package—A Druggist in a Small Town Sells \$1200 Worth of Non-secret Remedies in Six Months.

ADVERTISING OUR OWN COUGH SYRUP.

By W. C. PETERS, NEW PHILADELPHIA, OHIO.

From an eastern firm we purchased the following in one lot: 1 gross 18-ounce fish globes, 1 gross packages of fish food, and 500 goldfish.

We dropped two small fish in each globe and set the entire lot in our windows, placing a 25-cent bottle of cough syrup back of each globe. A large window card in the center bore the announcement:

“Two goldfish and a globe *free* to every customer purchasing a bottle of our cough syrup, Saturday only.”

Wednesday, Thursday, and Friday we used our



W. C. PETERS.

daily paper, carrying a small advertisement as follows:

“144 fish globes, each containing two goldfish, given away next Saturday, at Peters’ Drug Store. See the fish in our window.”

The larger fish we put in a tub near the front of the store, placing a card on same as follows: “Large fish ten cents—catch ’em yourself.”

Then we were ready. When we opened our place of business Saturday morning about 15 customers were waiting, and from the opening hour up to 9.30 A.M. we disposed of about half, and by 9 P.M. we had disposed of the entire lot.

HOW THE SALE PAID.

Now for the best part of this stunt. To every customer we suggested that they ought to have one or two larger fish. As a result we sold about \$10 worth of them. We also suggested that they buy a package of fish food, with the result that we sold \$11 worth of fish food. In all we sold 144 bottles of cough syrup at 25 cents—\$36; fish, \$10; fish food, \$11; total, \$57.

Now listen. The fish, globes, and fish food cost \$18; advertising, \$1.50; express on fish, \$1.50; total, \$21.00, plus the cost of cough syrup, \$12.96, or \$33.96 altogether. Net profit, \$23.04.

In addition to this, we had left over almost three dozen packages of fish food and a number of fish. We have greatly increased the sale of the cough syrup besides creating a good steady demand for fish food, which is a profitable ten-cent package to sell.

This scheme might be improved on by offering one or two additional fish to those customers who purchase a 50-cent bottle of the cough syrup.

PUSHING MY OWN NON-SECRET REMEDIES.

By O. P. McPHERSON, GLOSTER, MISS.

We have a town of about three thousand people, a very good surrounding country, and three years ago I decided to put out a line of my own remedies. The list was to cover everything in the way of

..... 19
McPHERSON'S DRUG STORE:
MR
Agrees to purchase for CASH one or more bottles of McPherson's Remedies or have a prescription filled, the amount of which (\$.....) please place to my credit on your PIANO OFFER.
Name.....
Do you want to work for this Piano? Sell \$5.00 worth and get an Agency.

household medicines. I first wrote my own formulas and submitted them to several manufacturers, finally placing my order with a firm to the extent of \$1200 in the first invoice. The preparations had

quality but carried a good margin of profit, two important essentials in non-secret remedies.

When the goods arrived I went to work to get them before the people. Having invested \$1200 in the goods it was up to me to sell them. I first offered my clerks in addition to their regular salaries an extra 10 per cent for all cash sales of my remedies.

INTERESTING THE WOMEN.

Then I bought an upright \$300 piano to be given away on the sale of McPherson's Remedies. I secured a young lady in every neighborhood in this and the adjoining counties to work for the piano. I furnished each with a pad of order blanks for my own remedies. About 25 ladies volunteered at once. They went to work sending in orders.

Each lady's orders were kept on file, and at the close of each week I footed them up.

Each dollar's worth sold gave the agent one vote or chance on the piano. After my first agents were appointed, any one else desiring to enter the work was compelled to purchase \$5 worth of my remedies. Before the close of the contest I had nearly one hundred ladies at work.

The result was that I sold the \$1200 worth of goods in less than six months at a profit of more than 200 per cent, and in so doing I created a magnificent trade on the remedies. Any one can do the same thing. And I find it much better to sell products bearing a profit than to handle the goods that do not pay. To any one desiring further information I shall be glad to give particulars.

THE VALUE OF KNOWING PEOPLE'S NAMES.

By **ARTHUR IRWIN SMITH,**
Fulton, Kentucky.

It was a combination drug store and cafe. "What is it, Mr. Smith?" inquired the smiling young soda dispenser, as I stepped up to the fountain. I gave my order, wondering vaguely where I had seen the young man before. I had been in the town only a week, and although I had patronized the establishment frequently during that time, I knew I had not given my name.

"Thank you, Mr. Smith," said the cashier, politely, as I paid him across the cigar counter.

My curiosity was aroused, and I stopped for a short chat with him. I found that he was the junior partner and quite willing to talk of the firm's business methods when he learned I was in the same line in another town.

"It is our policy," he explained, "to learn the names of as many customers as possible. Some think we carry it too far, but I assure you it pays in a town of this size, about ten thousand population. That plan may be impractical in the larger cities, but is very valuable in the smaller towns.

"As soon as a new customer enters the place we go after him. If he orders something which is to be delivered, it is an easy matter to get his name and pass it along to the other clerks who may be

called upon to serve him. If he patronizes only the cigar or cold-drink department there may be some difficulty. Very often two friends come in and call each other by name. We are very much on the alert for that sort of thing. Then sometimes an old customer comes in with a new one, and later we ask him his friend's name. We learned your name in that way.

"The clerk who gets the name first passes it along to the others. Thus every employee becomes acquainted with the customer and tries to make him feel at home in any part of the store.

"This matter of learning names is a thing that requires tact, however. It will not pay to make mistakes. If you are not sure of the right name, don't use any at all. We never call any one except an intimate friend by his first name. We avoid nicknames. Even my roommate, 'Boots,' becomes 'Robert' when he comes in here."

The young soda dispenser had talked barely two minutes, but he had said enough to make me think for the rest of the day. The big patronage they had, as well as the words of the junior partner, made me believe there was much good in the system.

A MIDWINTER SALE.

A Business Tonic for the Post-Holiday Dulness—Disposing of Christmas Left-overs—How to Accomplish It—Specimens of the Advertising Used to Overcome the Lethargy of the Season.

Immediately after New Year's comes a lapse of business. A torpid condition sets in as a natural reaction to the holiday rush. A stimulant is needed, something like a "Big Clearance Sale" or the "Special After-Holiday Sale" of the department stores. Whatever be the name of it, the purpose is the same. The aim is to pull in purchasers, to

ADVERTISING THE SALE.

When the sale has been decided on, the advertising should be carefully prepared. Have it live and readable. We are reproducing some good examples of sales advertising in this article. Above all, the newspaper announcements or circulars, whatever the medium employed, must have a sincere ring. People soon find the truth-telling places, and trade gravitates that way with absolute certainty. But this does not preclude interesting news. Dry talk palls on people.

Submit advertising copy to the newspaper at least two days before it appears in order that the cuts for illustration may be properly prepared and the proofs read. The proprietor should see that all advertised

SPECIALS

For To-morrow's Busy Selling

If you have never been to one of our Saturday Sales, you have a surprise in store for you—an economic surprise—an educational surprise—a convincing surprise. When you see these goods at the prices there will be a big tug on your pocketbook. It will be hard for you to keep from buying. Some of the choice specials are:

Rubber Gloves These would be good values at 60c.	41c	SOAP RACKS Nickel, to hang over bath tub. Very shapely and decorative. Made to sell at 75c	58c
TOOTH PICKS Hardwood very shapely—No silvers—Tough and strong—Pkg.	4c	BATH SOAP Elegant cocoa olive—large cake. Very lasting. 10c also	7c
CINNAMON First quality fresh from 2nd year sprouts, bark ground to order. Pkg.	9c	HAIR BRUSH An exceptional lot, fine backs and bristles. Regular 75c value at	47c
BATH MATS 24 x 42, very handsome and desirable. Perfect condition, new, easily worth \$1.25	98c	WHISK BROOMS A basketful of 25c kind—to-morrow only at 19c. About two dozen only. Come early	19c
Violet Perfume Not Piver's or Roger's & Galen's—but certainly an elegant violet extract. Many at \$1.00 no better To-morrow	48c	Water Bottles New bottles of new rubber. Superior to lots offered at \$1.25. To-morrow only	86c

We do business on close margins. That's why business is growing so remarkably. Let us fill your prescriptions—at the right price—our "close margin" price.

(Name, Phone No. and Address here.)

A newspaper announcement of some special attractions—an M. P. Gould ad.

dispose of left-overs from the holiday stocks, and incidentally to sell whatever regular goods can be moved.

The proprietor should inject everybody with a certain enthusiasm in the sale. The clerks should be willing to do a little more than usual. The manager should see that the inside displays, the window dressings and price tickets conform with the advertising. For the public will respond. They appreciate these mid-winter sales. They read the sales ads. in the daily papers with as much interest as they do the news.

HOUSEKEEPERS' SALE DAY TO-MORROW

To-morrow will be a busy day in this store. We will be busy because of the goods offered at these prices.

If you are a housekeeper, and don't come to the store to-morrow, you will certainly miss a chance for decided saving in your purchases. Some of the numerous items are:

Household Ammonia, 10c kind at	7c	Hand Scrubs, easily worth 10c, Saturday	6c
Hartshorn, 10c bottle at	8c	Borax, 10c box for	8c
Baking Soda, the usual 10c package, 2 for	15c	Pure Castile Soap, 10c, Saturday for	8c
Lye, as much as you ordinarily get for 10c, Saturday only	6c	Rubber Gloves, very durable, 85c quality, Saturday only	77c
Witch Hazel, double distilled, Dickinson's Finest, usual 25c bottle at	21c	Crude Oil, 10c bottle, Saturday only	7c
Usual 10c bottle at	8c	Splendid Furniture Polish, 25c size, Saturday	19c
Cleaning Fluid, one of the best things we have ever handled, usual 20c size for	14c	Metal Polish. We don't know anything better than this for copper, brass, nickel, etc., 25c size, Saturday	21c

Spices and extracts. We have put on sale our splendid line at a material reduction for Saturday only in order to get more people to use them. We guarantee them to give satisfaction. Money back if you don't think they are worth the price.

This ad. was originally set up in a single newspaper column and was 12 inches long. We cannot reproduce the vertical arrangement for reasons of space.

goods are properly displayed at the counters. He should be sure, too, that all the people who call are promptly informed as to prices, quality, etc. Slow moving goods should be reported by the clerks at once so that the prices may be lowered and the cash values obtained. Many druggists carry goods over to the next year rather than have a sale and do a little chiseling on the price, but it is well to remember that there is nothing like the cash. Besides it

will soon be time to take inventory, which makes it desirable to reduce the stock.

HANDLING THE HELP.

Sometimes during sales special help is hired. In that event it behooves the proprietor to help the new salespeople. Let him instruct the special clerks how to handle and show goods, wait on customers, make out sales checks if these are used, and in fact see that all duties are intelligently understood. It is not sufficient that new, inexperienced salesmen be given a salesbook and told to go ahead. Thorough instructions must be given in the store's methods of doing business. In order that the inquiries of customers may be intelligently answered, the help should know the location of all the stocks of the store, especially those advertised. Of course, if a proprietor can run a sale without special help that is all the better as it reduces the cost of selling.

Salesmen must keep in good order all stock under their charge. Customers of the house, as well as those in authority, readily recognize who takes an

interest in the business by the display and arrangement of the stock. No excuse can be taken for merchandise that does not present a clean, attractive appearance. Every article should be properly marked or tagged, and each piece of goods ticketed in plain, neat figures, so that a glance will tell price, size, etc.

No matter what the stock is, it should be attractively displayed, and the exhibit changed regularly, having a suitable card on all goods so exhibited. When a sale is completed and clerks are through showing goods, articles should be rearranged as soon as possible, thus avoiding confusion and keeping the selling space clear and in good shape for new business.

SERVING CUSTOMERS.

All customers should be waited upon with equal promptness and politeness, no matter whether the purchase is large or small, whether it is simply an inquiry or an exchange of goods. There should be no favorites among customers. First come, first

1st JANUARY SATURDAY SALE

Every Saturday is Sale Day in our store. Remember that you can always get something at a big saving in price at this store on Saturday. It may be exactly the thing that you have come down town to buy. Next Saturday, January 5th, we offer:

Fifty pairs of wool insoles, fine, soft quality, keep the feet dry and warm, our price 25c, Saturday, per pair **19c**

A lot of very nice chest protectors, soft and warm, made to sell at 75c, Saturday only at **59c**

Russian Violet Perfume, regular price 75c per oz. We want more of our customers to know how good this is, Saturday only the price will be **49c**

Chocolate Caramels sold in many stores at 35c. These are fresh and exceedingly delicious. Saturday only **21c**

Two-qt. hot water bottles, fine quality rubber, in perfect condition, made to sell at 85c in the big stores. Our Saturday price only **79c**

Cold Cream, pure white, made of the finest materials, unexcelled for rough skin and chapped hands, 25c jar Saturday **19c**

We can save you money on prescriptions. None but best materials used. All work done by graduate and skilled pharmacists.

2d JANUARY SATURDAY SALE

Our Saturday Sales grow in interest. More people attend them now. More people are pleased with our Saturday Bargains. Their reputation is spreading all over town. Why don't you save money when it is so easy to save?

A special lot of hair brushes bought for the Christmas trade but arrived too late to get the full benefit of the holiday buying. We now have too many of them on hand. We intended to sell them at \$1.00, \$1.25 and \$1.50. You can have your pick next Saturday at **79c**

Fancy Stationery. The correct shape and papers. Fine envelopes to match. Usually 69c quality **49c**

A nice line of penholders, fancy blotters, writing tablets at special prices; ask to see them.

We want more people to take our Syrup of White Pine, Horehound and Tar. It is one of the best combinations known for coughs and colds, sore throat, hoarseness. The regular price is 25c as everybody knows. On Saturday only you can buy it for **19c**

Tooth Powder at a big saving. A delightfully fragrant, antiseptic, fine powder. Pleasant to use, nothing finer. As large as the usual 25c bottle. Saturday only **16c**

Saturday Candy

Fresh—a big lot just received. These are as nice chocolates as can be bought anywhere for 50c to 60c per pound. If you buy a box and are not satisfied with the quality you can return them and we will hand your money back. We have an immense sale every Saturday. Take home a box next Saturday.

Our prescription business is tremendous. Every drug and chemical being prescribed at this time is in our store. Only graduate experienced pharmacists prepare your medicines if you bring your prescriptions to us. Just remember the price you have paid for an old prescription and bring it to us and see what we charge on Saturday. **29c**

3d JANUARY SATURDAY SALE

We have made especially big preparations for this Saturday's sale. Last week there was such a rush that we couldn't supply one-half the sale-goods called for. You'd better come early though, and avoid the crowd. Some of the goods offered are remarkable bargains.

Rubber Gloves—Just arrived a big stock of soft, flexible, new perfect rubber gloves. Listed to sell at \$1. We want to give them a chance—on Saturday they go for only **79c**

Soaps—Castile Soap, finest and purest quality, or glycerin soap, clear and transparent, or delightfully perfumed soap, your choice at **9c**

Cod Liver Oil Emulsion—It is the thing to take this freezing weather. Gives the body lots of heat and prevents your taking cold. Our regular 85c bottle, on Saturday only, fresh made **77c**

Almond Cream—No need of having any more sore and cracked lips, or rough hands or faces. Almond Cream makes them soft. The purest, whitest, creamiest application, 35c bottle, on Saturday only **25c**

Syrup of White Pine and Tar—Breaks up a cough, soothes an irritated throat, and eases congestion. It's the finest and most pleasant tasting cough syrup you ever tasted. To get you acquainted we will sell a 25c bottle on Saturday at **21c**

We carry a complete line of baby requisites—up to date, dainty and chock-full of comforts for the little one. Just come and have a look.

Remember that perfect and reliable prescription compounding is just as important as a reliable doctor. The doctor can be ever so good, but if his medicine is not put up in the right way, it will not do the right work in the right time. Our prescription department is a matter of pride with us. The drugs and chemicals used are absolutely fresh and full strength; all prescriptions are compounded by graduate and skilled pharmacists. Remember this next time you have a prescription to be filled.

served. A customer who is being waited on should never be left because a liberal buyer, who is well known, approaches the counter. Goods must not be misrepresented. Customers buy upon the understanding that they can get their money back without argument; therefore only true representation must

urging of merchandise upon people is not countenanced, nor is indifference proper. While large sales are important factors with all salespeople, and form in part the basis of their salaries, yet general interest in their duties, the exercise of patience, showing goods pleasantly and cheerfully, polite attention and care in waiting upon customers, are also very important factors in making a success of a sale. Clerks even in a rush should leave a good impression and never let customers go away feeling that they have been treated in an uncivil manner, as it hurts the clerks personally and also the store.

Sweeping should be avoided as much as possible during the day, but the store at all times must be neat and clean in appearance. Clerks should not allow parcel boys to loiter in their divi-

B. S. COOBAN & CO. 559 West Sixty-third Street
CHICAGO

.....SAVE MONEY BY LEARNING ALL ABOUT.....

This Famous Monthly Sale

2 DAYS ONLY Fri.=Dec. 6-7=Sat. 2 DAYS ONLY

GOOD NEWS IN FINEST STATIONERY

25c Writing Paper Now	16c	50c Writing Paper Now	39c
Volsioe	25c	Heather Linen, Clovelly Pearl Gray.....	35c
French Poplin	25c	Swiss Blue.....	35c
Monsieur de Paris	25c	French Per. ale.....	50c
Kara Linoe	30c	Hot Pressed Veilom.....	50c
Louisine	30c	Berkshire Linoe Fabric.....	50c
Heather Bond.....	35c	Monsieur de Paris, large.....	40c
Highland Linoe, Claiborne White.....	35c	Sonny Days.....	25c
Heather Linoe.....	40c	Teddy Bears.....	40c
Highland Linoe, Clovelly White.....	35c	French Chiffon, extra size.....	50c
		Foreign Letters.....	40c

NAIL NOTIONS

No matter what your method of taking care of your nails, here are just the tools you want. Our assortment shows almost every appliance and preparation known to the manicuring set. Scissors, tweezers, emery boards, files, polishers, orange wood sticks, etc., are a few of the many in our stock. In enamels, nail bleaches and creams we have about everything you want.

CHOICE CIGARS

The Cigars the smoker of taste really enjoys are here. We know where to get the BEST BRANDS—how to always keep them in good condition—and how to offer bargains like

REGULAR 10c FOR TWO DAYS ONLY	
Tampa Fad.....	8 for 25c
Chicago Londres.....	4 for 15c
REGULAR 10c FOR TWO DAYS ONLY	
Azora Londres.....	3 for 25c
La Preferencia.....	

BRUSHES FOR ALL PERSONAL USES

What is your wish in Brushes? Here are Hair Brushes, Tooth Brushes, Complexion Brushes, Nail Brushes, Lather Brushes, Nail Scrubs, Etc. Our 'lines are most complete. Just to show how low prices are, we quote:

Prophylactic Tooth Brushes	25c	Hair Brushes, solid back	50c
Kleanwell Tooth Brushes	25c	Lather Brushes	20c
Complexion Brushes	25c	Ideal Hair Brush	65c up
Bath Brushes	50c	Hand Scrubs, regular 25c value	16c

B. S. Cooban & Co., 559 W. 63rd St., Chicago

A facsimile of one page in a four-page folder distributed by B. S. Cooban & Co., of Chicago. The original was 7 by 10½ inches in size.

be made. In all matters relating to the sale, due courtesy is required. Clerks are expected to accommodate themselves, as far as possible, to the peculiarities of those they are serving, being civil and polite in their attentions.

If a clerk doesn't happen to have just the article the customer asks for, he should show the nearest he has in stock, and if that won't answer the purpose, consult the proprietor. Possibly it can be procured. Clerks should try to understand what the customer wishes and get it as near as possible, never showing too many goods at a time, as it is confusing and often results in the loss of a sale. If a second customer is waiting, a disengaged clerk should be called. If all are busy, a customer should be asked to wait until one is disengaged. The undue

B. S. Cooban & Co. 559 W. Sixty-third Street
CHICAGO

—All Wise Buyers Will Surely Visit—

THIS FAMOUS MONTHLY SALE

2 DAYS ONLY FRIDAY Dec. 6-7 SATURDAY 2 DAYS ONLY

Price Persuasions in Rubber Goods

The finest quality in rubber goods at the lowest prices possible—there is a nutshell you can argue as to why you should buy your rubber goods here. This store is headquarters for all kinds of rubber articles used in the sick room or home. Each article comes from a first class manufacturer. Skillfully buying in large quantities enables us to quote ABSOLUTELY ROCK-BOTTOM PRICES.

SPECIAL IN HOT WATER BOTTLES

Every one is soft, pliable and new rubber and every one is sold with our guarantee behind it. 2 quart, 90c; 3 quart.....

\$1.00

SPECIAL IN FOUNTAIN SYRINGES

Best rubber; stout seams; heavy tubing; three pipes; patent stop. Here is a 2-yring that outlasts many that cost twice as much. 2 qt.

\$1.18

SPECIAL IN BULB SYRINGES

The Alpha has all the points of excellence to be found in a strictly high grade bulb-syringe—no matter how high the price may climb. The tubes are of BEST RUBBER, with re-inforced.....

\$1.25

SPECIAL IN ATOMIZERS

Here are every sort for toilet or medicinal purposes—for oil or water, for nose or throat. Each thoroughly tested before placed on sale. The bedrock prices commence at.....

45c

SOAP SPECIALS WORTH READING

Cleanliness is next to Godliness and saving money is practically making money. The two ideas in the preceding sentence are arguments strongly applicable to the following items:

CHERRY BLOSSOM TAR	CLOVER BLOSSOM BRIDESMAID ROSE	OLD ENGLISH WOOD VIOLET	TRANSPARENT GLYCERINE CARBOLIC
ARMOUR'S WASH RAG SOAP, 7c	All regular 10c Soaps, 5c Cakes, 15c Box.		AUDITORIUM BATH, 8c

The Finest Candy in Chicago

Can be had in this store. We carry Havler's Lowmeyer's, Johnson's, Allegretti, Craftsman Guilds, etc. Every one is warranted fresh, pure and wholesome. Here's a great special:

CHOCOLATE CHIPS, 25c a lb.; REGULAR 50c

B. S. COOBAN & CO. 559 West Sixty-third Street
CHICAGO

This is another page of the folder sent out by B. S. Cooban & Co., of Chicago.

sion, and should see that all customers are properly served, and the greatest courtesy and politeness shown them, whether buying or simply looking at goods. Strangers from out of town visiting the pharmacy should be made to feel at home, and particular attention paid them.

AN EFFECTIVE RUBBER GOODS DISPLAY.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

This trim proved a good one, nearly \$25.00 in sales accruing from it. It was a plain "black and white" affair and consisted entirely of rubber goods.

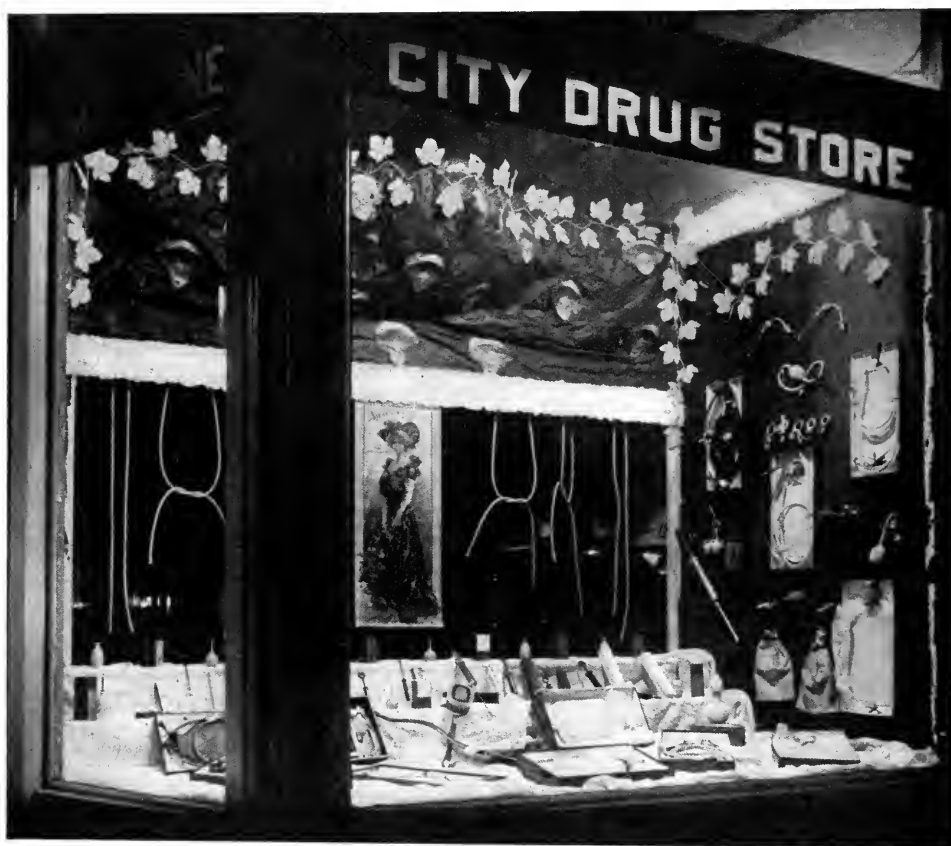
There was a flat base with steps at the back covered in white. The upper part of the background had a canopy effect which stood out about 2½ feet toward the glass, the canopy being sup-

ported by bent wire. The black surface was made of crumpled black tissue paper, onto which at given intervals were pasted the girls' heads which I had cut from old magazine covers and saved.

The white strip across the background was white cloth puffed as shown. White grape leaves adorned the top of the background, while hanging down on the background were pieces of rubber tubing six feet long. The side wall was solid clear pine

covered with dead black tissue paper. The top was decorated with a bar of white puffing across the border, below which was a semicircular white grape vine.

The display consisted of the following sundries: Hot water bottles, fountain syringes, combination hot water and syringe, breast pumps, household syringes, atomizers, teething rings, nipples of all



kinds, bottle cleaners, baby rattles, sponge bags, hard rubber syringes assorted, veterinary syringes, nursing bottle fittings, bottle cleaners, bath sponges, bath brushes, ear and ulcer syringes, female syringes, infant rectals, catheters, colon tubes, pacifiers, etc.; eye pipettes, medicine droppers.

Our windows are about 5½ feet wide but are high off the pavement, which renders it hard to show the full depth in a photograph.

DRUG-STORE SKETCHES.

A CURE FOR THE SUICIDE BUG.

By M. L. DUMBLE.

A druggist in this town with an abiding sense of humor has found a cure for the suicide "bug" that should find favor with his contemporaries throughout the country, not to mention those families afflicted with a "would-that-I-were-dead" member. It was discovered somewhat like this:

The other day, just as Old Sol was putting the loud pedal on the heat key, a youth of about eighteen summers walked into the drug shop and approached the counter with an air suggesting a fixed purpose. His face was chalk-white, his lips twitched, and his eyes wore that expression of terror inspired by a possible idea that his shadow might be going to jump up and give him a knife-thrust in the back.

"Will you sell me a dime's worth of strychnine?" he inquired, pinning his voice down to something like steadiness. Suicide was written all over him in letters a Flatiron block high. Now the suicidal desire on the part of poison patrons was in nowise new to the druggist, but he thought he sighted promise in the boy, and therefore determined upon a course which for originality has all former cures lashed to the post.

"Certainly I'll sell you strychnine. For what purpose is it to be used?" he asked.

"Well," confided the boy, "I'm in love with a woman here in town whose husband abuses her frightfully. My parents object to my paying her attention. This afternoon we had a beast of a row. I won't stand for it any longer—I want to die."

"Very well," the druggist said. "Do you wish to take the poison here? If you do, step into the laboratory and drink all the water you can hold. Strychnine acts more quickly and more effectively when the stomach is filled with water."

The boy seemed not in the least perturbed by the acquiescence of the man and was game to the finish. "I can't drink another drop," he said some minutes later after guzzling down an enormous quantity.

"All right, then, swallow the strychnine." And he did—a whole tablespoonful of it without wincing! "If you will step out here," said the obliging druggist, leading the way to the rear door, and lie down on that large box over in the corner of the yard, you will be dead in five minutes."

The boy sought the box as directed, and lay himself down in an attitude popularly supposed to be becoming in death, while the man returned to his shop and to the wants of less morbid patrons.

In about five minutes a showily dressed woman of apparently twice the age of the youth rushed frantically into the store and asked for "James."

"Do you mean a tall, lanky youth, dressed in a light gray suit?" inquired the druggist.

"That's James. Oh! tell me quick, what did he buy?"

"I sold him a dime's worth of strychnine and he took it here. He is out in the rear yard trying to die now," nonchalantly answered the man, handing out a bottle of Peruna to one customer and a package of Rocky Mountain Tea to another.

"Murderer!" hissed the woman, as she made a dash for the rear.

A few minutes later the accused criminal took a peek out of the back door. The would-be suicide, who had ardently wooed the death angel and the shelter of her dull gray wings, was now in the midst of a terrible nausea. It was racking his body in a way that made a Detroit excursionist in a lake storm look like a mean imitator. The woman was wringing her cheaply jeweled hands and attempting to do an emotional scene from a Charles E. Blaney melodrama, with Bertha M. Clay lines.

But the boy would have none of her. He wildly waved her away, expressing in no tender terms a consuming desire to be "left alone." Whereupon the woman went away in a huff, declaring him an ungrateful little monster. Shortly thereafter, when the heaving sensation had somewhat abated, the lover who wanted to launch himself across the Great Divide on a suicide ferry, beat it ingloriously, via the back alley. He had swallowed a goodly portion of zinc sulphate, than which there is no suicide cure more efficacious.

In the excitement everybody forgot the names of the actors, but any "James" may claim the leading rôle in this near-tragedy that turned out to be pure farce-comedy.

To the Editors:

Enclosed find money order to pay for my subscription to your most excellent journal for the coming year. I am taking several drug journals, but I consider yours head and shoulders above them all.

V. P. WETTERGREEN.

Bridgewater, S. D.

BOARD QUESTIONS ANSWERED.

AN INDIANA EXAMINATION.

PHARMACY.

(Continued from December BULLETIN.)

8. (a) Fluidextracts—Define. What strength of the drug do they represent? Outline a process for making. (b) Extracts—Define. Outline process for making. What strength of the drug do they approximately represent?

(a) Fluidextracts are concentrated alcoholic or hydroalcoholic solutions of vegetable principles, which are permanent and represent all the active virtues of the drugs from which they are made. One gramme of the drug is represented by 1 Cc. of the fluidextract, with the exception of several fluidextracts which are adjusted by standardization to definite alkaloidal strength.

One thousand grammes of the powdered drug of the prescribed degree of fineness are thoroughly moistened with a certain quantity of the initial menstruum and packed more or less firmly in a cylindrical percolator; the drug having been properly covered with a paper diaphragm, enough menstruum is poured on to saturate completely the powder and leave a stratum above it. When liquid begins to drop from the percolator, close the lower orifice, and having closely covered the percolator to prevent evaporation, macerate for forty-eight hours. Then allow percolation to proceed slowly, gradually adding menstruum (alcohol or alcohol and water) until the drug is exhausted. Reserve the first 700 to 900 Cc. of the percolate, and evaporate the remainder, at a temperature not exceeding 50° C. (122° F.), to a soft extract; dissolve this in the reserved portion and add enough menstruum to make the fluidextract measure 1000 Cc.

(b) Extracts are permanent, soft, solid or dry preparations obtained by evaporating a solution of the medicinal principles of a drug. The Pharmacopœia recognizes 27 extracts, of which 18 are directed to be made from the drug direct and the remaining 9 by evaporating the official fluidextracts of the respective drugs. Alcohol, water, or mixtures of the two, and ether are used as menstrea; sometimes either acetic acid or ammonia water is added to the solvent. The manipulations necessary to produce extracts include maceration, expression, percolation, decoction, infusion, evaporation, use of steam heat, vacuum apparatus, etc. The details of

the formulas vary so much that a general formula for all is impossible. Powdered extracts consist of the dry extract powdered and incorporated with a suitable diluent, such as milk sugar, powdered licorice root, etc. The strength of an extract is from four to five times that of the drug.

9. (a) Tinctures—Define. Outline process for making by maceration and by percolation. Of what various strengths are they? Name four, giving their percentages of strength. (b) Infusions—Define and tell how made.

(a) Tincture is the name applied to solutions of non-volatile or only partially volatile substances in liquids other than simple water or glycerin, and which invariably contain alcohol.

Wherever tinctures are to be made by maceration, the Pharmacopœia directs that about three-fourths of the total menstruum be added to the powdered drugs and the mixture set aside in a shady place at a temperature of about 15° to 20° C. (59°-68° F.) with occasional agitation. The length of time required for maceration varies for different drugs, from 2 to 14 days, and is specifically stated in each official formula. At the expiration of the specified time the mixture is filtered through absorbent cotton, and when the liquid has all drained off sufficient menstruum is passed through the dregs to bring the volume up to the required measure.

Where tinctures are made by percolation, the Pharmacopœia, with very few exceptions, directs that the powder, having been moistened with the prescribed quantity of menstruum, shall be set aside without being compressed for a period varying from three to twenty-four hours before it is packed in a percolator. Having been properly packed and saturated with menstruum, it is allowed to macerate for 24 hours (in a few cases 48 hours) before percolation is started. This preliminary treatment is intended to insure more thorough penetration of the cellular tissue by the menstruum, and has been found very effectual in furthering the extraction of the soluble principles sought.

The strength of the tinctures of the U. S. P. varies from 1.6 to 50 grammes of drug, being in the majority of cases 10 or 20 grammes for every 100 Cc. of finished product. Hyoscyamus, 0.07 Gm. of mydriatic alkaloids in 1000 Cc.; aconite, 0.45 Gm. of aconitine in 1000 Cc.; nux vomica, 1.0 Gm. of strychnine in 1000 Cc.; opium, 12-12.5 Gm. of crystallizable morphine in 1000 Cc.

(b) An infusion is a preparation of a vegetable drug made by introducing the substance coarsely

divided into a suitable vessel and pouring thereon boiling water. The cover is let down and the product allowed to macerate for half an hour. Then it is strained with expression, enough water being passed through the strainer to make up the yield.

10. Emulsions: (a) Outline a general formula for making emulsions of heavy oils, giving order of mixing. (b) Of volatile oils.

(a) Not less than one-fourth nor more than one-half as much acacia as oil should be used, and not less than one and a half times nor more than twice as much water as acacia. Place in a mortar (flat-bottomed preferably) one-fourth as much *finely powdered* acacia as the oil to be used (7.5 Gm. of acacia for 30 Cc. of oil, or 2 drachms for 1 fluid-ounce), then add the oil and triturate well together into a smooth mixture. Now add *all at once*, not gradually, twice as much water as the acacia which has been used (15 Cc. of water for 7.5 Gm. of acacia, or 4 drachms for 2 drachms), and stir rapidly until a perfect emulsion has been formed, which is known by the appearance of a white pasty mass, free from oil particles, and a peculiar crackling noise as the pestle is drawn through the adhesive mixture. This primary emulsion should be well scraped with a spatula from the pestle and sides of the mortar, again stirred, and then the remainder of the water slowly added with constant stirring.

(b) To emulsify a volatile liquid, pour it into a perfectly dry bottle, add the powdered acacia, and shake well so that the acacia may become saturated with the volatile liquid. Then add water and continue to agitate until a homogeneous emulsion results, which can be further diluted by the gradual addition of water. Volatile oils and ethereal liquids will never form as perfect an emulsion as fixed oils, and separation of the mixture takes place more speedily. If care has been observed, however, in making the mixture, only a dense creamy layer will rise to the surface, which can be reincorporated by agitation. As a rule, volatile oils and ethers require more gum than fixed oils, and less than 30 grains of powdered acacia should not be used for each fluidrachm. The amount of water first added should always be equal to twice the acacia used. All emulsions of volatile oils are more permanent if made with the aid of some fixed oil previously added to the volatile oil; such emulsions are preferably made in a mortar.

11. (a) How do laudanum, deodorized tincture of opium, and paregoric differ? (b) How do water of ammonia, stronger water of ammonia, spirits of

ammonia, and aromatic spirits of ammonia differ? (c) How would you make water of ammonia from stronger water of ammonia?

(a) Laudanum is merely a hydroalcoholic extract of granulated opium, 10 per cent. Deodorized tincture of opium has the same morphine strength, but here the percolate is deprived of its peculiar nauseating principle to which the characteristic odor of the drug is due by first making a concentrated infusion and then shaking this with benzin. It is of lighter color than the ordinary tincture of opium and has not the disagreeable narcotic odor of the latter. Paregoric contains only 0.4 per cent of powdered opium together with camphor, benzoic acid and oil of anise.

(b) Ammonia water contains 10 per cent by weight of gaseous ammonia; stronger ammonia water, 28 per cent. Spirit of ammonia is an alcoholic solution of ammonia, containing 10 per cent of the gas, by weight. Aromatic spirit of ammonia is a hydroalcoholic solution of normal ammonium carbonate, containing 70 per cent by volume of alcohol, 1 per cent of oil of lemon, and 1/10 per cent each of oil of lavender flowers and oil of nutmeg.

(c) By diluting the stronger solution to 2.8 times its volume with water.

12. Give the pharmacopœial names of (a) salts of tartar, (b) cream of tartar, (c) tartar emetic, (d) white, (e) blue, and (f) green vitriols, (g) lunar caustic, (h) aqua fortis, (i) Spanish fly, (j) basicon, (k) citrine, and (l) blue ointments, (m) red and (n) white precipitate, (o) calomel, (p) corrosive sublimate, (q) Monsel's salt, (r) Epsom and (s) Rochelle salts, (t) sugar of lead, (u) caustic potash, (v) borax, (w) carbolic acid, (x) synthetic oil of wintergreen, (y) synthetic oil cassia, (z) urotropine.

(a) Potassii carbonas, (b) potassii bitartras, (c) antimonii et potassii tartras, (d) zinci sulphas, (e) cupri sulphas, (f) ferri sulphas, (g) argenti nitras fusus, (h) acidum nitricum, (i) cantharis, (j) ceratum resinæ, (k) unguentum hydrargyri nitratis, (l) unguentum hydrargyri dilutum, (m) hydrargyri oxidum rubrum, (n) hydrargyrum ammoniatum, (o) hydrargyri chloridum mite, (p) hydrargyri chloridum corrosivum, (q) ferric subsulphate, (r) magnesii sulphas, (s) potassii et sodii tartras, (t) plumbi acetat, (u) potassii hydroxidum, (v) sodii boras, (w) phenol, (x) methylis salicylas, (y) cinnaldehydum, (z) hexamethylenamina.

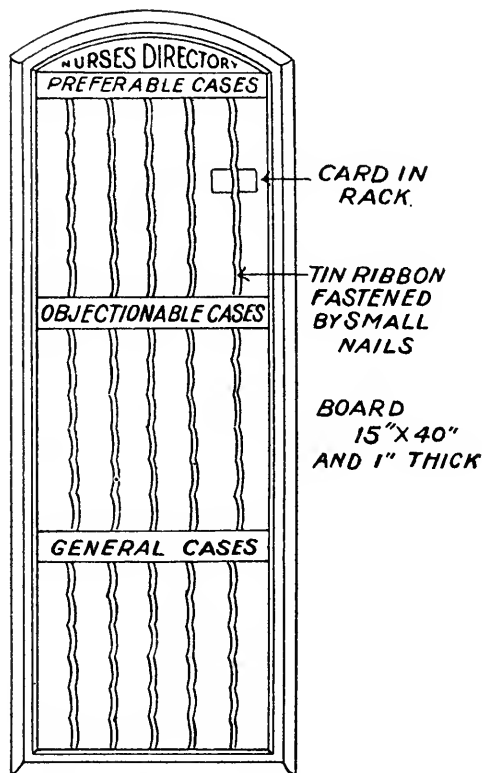
(To be continued.)

DOLLAR IDEAS.

A NURSES' DIRECTORY.

Joseph Hart, Spokane, Washington: For a long time nurses' directories have been conducted in some stores, and owing to the recent and growing demand for trained nurses many druggists are now starting one. Let me present a very crude drawing and a little explanation of the directory I found to be not only the least costly but the most satisfactory.

A board is used which is one inch thick, forty



inches long and fifteen inches wide. In it is a cut or cavity about $\frac{1}{4}$ inch so as to protect the cards. The board is attached to and painted to match the fixture nearest the private store telephone. This board is divided into five rows of small tin ribbons of two strips each, festooned with small nails, leaving enough room between nails to pass the small cards ($1\frac{1}{4}$ by $1\frac{1}{2}$ inches) and hold them securely in place. These five rows are divided into three sections as illustrated.

Two complete rows are used for graduates, two for undergraduates, and one for practical. On the small cards are written the names, the kind whether

graduate, undergraduate or practical, telephone number and cases preferred. If contagious diseases are objectionable this is also noted. As demands for nurses are generally by 'phone, one readily appreciates conciseness. Apropos, the names are not arranged alphabetically but as to cases, namely, preferable, objectionable, and general. It is well to note on back of each card whether the nurse is willing to take out-of-the-city cases.

Every name on the ready reference board has a corresponding name on a larger card which is kept in alphabetical order in a one-drawer cabinet file. These cards bear all the information that is on the smaller one, and in addition the school from which the nurse graduated and hospital where instruction was received, references, doctors in particular, present residence and home.

When the nurse is reported on a case, the smaller card is filed with the larger one in the cabinet, and is again replaced on the board when she is ready for another case.

By all means avoid the question of salary; leave that to the people interested. I do not think it a good plan to charge for registering; however, some druggists do. Vouch for no one. Merely give what you have on your card when information is asked.

Supply the nurses on your register with clinical charts having your advertisement of sick-room requisites.

BUILDING BUSINESS ON FUMIGANTS.

J. C. Lowrie, Weidmann, Ontario: A scheme that we have used for some time with a great amount of success is that of advertising a disinfectant, using the formaldehyde and potassium permanganate preparation which is familiar to all druggists, but perhaps our method of bringing it before the public notice may be new to many.

The majority of druggists carry the disinfectant in stock, but let the business come to them rather than go after it. The preparation brings a handsome return, but the druggist must use his own judgment on the price.

The majority of people, after the death or sickness of one of the family, desire to disinfect the house. Therefore on hearing of any instances of death or contagious disease, we send out printed matter announcing that we have the disinfectant in stock and explaining that ours is the best on the market in points of price, quality, safety, etc. As a

The result of our scheme is that we have worked up a large business in this particular line.

Count the cost of each prescription, and at the close of each thirty days take an invoice of your prescription work, and then to the physician sending you the most profitable month's work give a complimentary box of cigars, say twenty-five in the box. Not only judge the file by its cost, but also consider the writing, the style of blank used by the physician, and mark him down especially if any other blank than your own is used. Give each doctor credit for all refills. Try it.

F. Boettger, Peoria, Ill.: The following formula for cold cream is somewhat similar to the usual recipes excepting that it contains a little benzoic acid. Products without this ingredient will gradually acquire a smell, slowly, it is true, but surely.

If firmer cream is wanted use more wax. Neutral oil is also called petrolatum oil.

[illegible]

F. C. Heupel, Laporte, Ind.: Here is another help for marking goods in addition to using adhesive plaster. I use an indelible lead-pencil to mark the cases containing pocket combs and any other dark objects that are not injured by being so marked. Turning them towards the light enables the marking to be seen plainly. This method is much quicker than fastening plasters or tags on the goods.

LETTERS.

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

FOUR LETTERS REGARDING THE USE OF STAMP-VENDING MACHINES.

So many druggists are now using slot machines for the sale of postage stamps that the editors of the BULLETIN were curious to know how successfully the idea was working out, how much of a relief the instruments proved to be, and whether or not the public took kindly to the change. We asked four druggists to give our readers the benefit of their experience, and their letters follow:

To the Editors:

I have your letter of October 18 requesting a recital of our experience with the "Silent Partner" postage-stamp machine, made by the Automatic Service Company of this city.

This machine carries 100 pockets, each pocket containing four 1-cent stamps. The purchaser deposits a nickel in the slot, and upon pressing a lever one of these pockets presents itself and delivers to the purchaser the four stamps.

We installed one of the machines in our Broadway store June 16, 1909, and up to November 1 the gross profits have been \$70.50, one-half of which has gone to the company and the other half to ourselves. Recently the company has offered these machines for sale instead of placing them on a commission basis. As this meant a profit of something like 100 per cent on the money invested for the time we have had the machine, we immediately purchased one.

We have no difficulty in advising our customers to use the machine, as the more intelligent class realize that stamps are usually sold in a pharmacy as a matter of accommodation. They are willing to pay for this accommodation, and I can see no reason why any pharmacist should hesitate to install such an instrument as it not only pays a good profit, but, being automatic, takes care of itself. In view of the fact, furthermore, that the old telephone nuisance has been remedied by the use of the slot 'phone, it may be said that the community at large is gradually waking up to the fact that the pharmacy is no longer a place of accommodation and a free information bureau.

I might add that the company installs machines for the sale of 2-cent stamps as well as those for penny ones.

BRADT DRUG COMPANY,

Albany, N. Y.

By WARREN L. BRADT.

To the Editors:

In reply to your letter regarding stamp-vending machines, we would say that we are heartily in favor of this solution of a fixed problem. There are of course many sides to this question, and the location and character of an individual store must to a certain extent be taken into consideration. We personally find the use of stamp-vending machines a great advantage to us in that they give us time to attend to our regular customers while the stamp customers have to attend to themselves. Before we used the machines we found that we were spending a great deal of time waiting on stamp customers, who usually required three times as long to get their money ready as it took to sell them a stamp, and in the meantime regular customers were getting impatient or going out because they were not waited on. While we undoubtedly lose a few customers who do not approve of this method of handling stamps, yet we do not think that this loss amounts to enough to be considered, certainly not to as much as we suffered through the loss of customers not being waited on while we were selling the stamps. The greatest drawback to stamp vending machines that we have seen thus far is that they are not perfect and will get out of order. When they work they are a great relief. We wish to reiterate, however, that we are in favor of the stamp-vending machine, even a machine that sells the stamp at the face value.

A. B. HUESTED & Co.

Albany, N. Y.

To the Editors:

We have been using the Thexton Stamp-vending Machine for the past eighteen months and find it satisfactory in every respect.

This machine, to our way of thinking, provides the very best solution of one of the aggravating troubles of the retail druggist, viz., the handling of postage stamps. Furthermore, the great majority of our customers take very kindly to the machines operated in our two stores.

We cannot recommend the stamp-vending machine idea too highly, and we think that when brought to the attention of progressive retailers they will become equally interested and coincide with our views.

A. D. THOMPSON DRUG Co.

Minneapolis, Minn.

To the Editors:

Replying to your recent favor regarding stamp-vending machines, I take pleasure in saying that I have had in my drug store one of the Thexton machines for several months and have found it a splendid convenience.

It not only does away with all trouble connected with the selling of postage stamps, but proves quite an attraction in the store, as may be proved by the great increase in the sale of stamps since the machine was installed.

I also find the advertising feature connected with this machine very effective, direct, and at the same time inexpensive. I cannot speak too highly in favor of the device.

C. F. FISCHER.

Minneapolis, Minn.

A STOCK CARD RECORD FROM A DUBLIN DRUGGIST.

To the Editors:

Your BULLETIN for October has just reached me, and, as usual, I have lost no time in getting through it, from cover to cover, for I seldom fail to come across many things well worth scoring for future reference. More than once your "Dollar Ideas" have given me a groundwork on which to build plans, perhaps not exactly as suggested, but still proving extremely useful. In return for these ideas which I have received I should like to return the compliment and send you one of mine, which I found saved in the first twelve months much more than its initial cost. It originated with the great difficulty which I experienced in checking invoices, for one cannot possibly remember the history of each article in his pharmacy.

Every line on every invoice I receive I copy out on cards, such as I enclose. These are arranged alphabetically, with index cards. They are kept under several heads: Drugs, Patents, Sundries, etc. Each card represents one drug or patent, as the case may be. When the cards have been in use for some time, by removing any single one from its place it at once indicates the following:

1. The different dates supplies were received.
2. The amount of each order and how long it lasted.
3. The cost price as entered on each invoice, with discount and cartage.
4. The source of supply.
5. The retail price charged.

No. 1 and No. 2 at once show how the stock is moving, and guide future ordering. They tell you

how much you use in any given period, etc. No. 3 tells at once whether a uniform price has been charged throughout, more especially if it is obtained from different sources. If the charge varies without cause, which I have frequently found out, it should be indicated on the invoice, and deducted at

Name, <i>Cotton Wool. Hospital. 1 lb.</i>				
DATE	QUANTITY	COST	FROM	RETAIL
9.12.09	7	$\frac{1}{4}$ <i>15s</i>	F. J. J.	10
24.2.09	28	$\frac{1}{2}$ <i>net</i>	B. J. B.	.
4.6.09	56	$\frac{1}{2}$ <i>net + 4s</i>	F. J. J.	.
26.8.09	56	$\frac{1}{2}$ = .	.	.
23.12.09	58	$\frac{1}{2}$ = .	.	.
11.1.10	56	$\frac{1}{2}$ <i>15s</i>	B. J. B.	.
3.3.10	112	$\frac{1}{2}$ = .	.	.
20.6.10	7	$\frac{1}{2}$ = .	M. R.	.
21.6.10	112	$\frac{1}{2}$ = .	B. J. B.	.
				<i>over</i>

A stock record used by Hanna, of Dublin.

settlement. It also shows the saving, if any, obtained by purchasing in large quantities.

A cabinet with four drawers, each capable of holding 1000 cards, cost me 16/6 (\$4.12), while 4000 cards, specially ruled to my requirements, cost £2 (\$10).

Perhaps the method of thus registering stock already obtains in many pharmacies throughout your country, but I submit these particulars nevertheless.

Dublin, Ireland.

VICTOR E. HANNA.

SELL THE THINGS ADVERTISED IN THE MAGAZINES!

To the Editors:

A window display suggestion which you had on page 380 of the September BULLETIN was used in the store and met with great success. It was the one called "If it's advertised we have it." and it had reference to the things advertised in the magazines. We adopted this idea but improved on it by attaching different colored strings from the articles themselves to the magazine ads. that we hung all over the back of the window. The local paper said of the trim:

"Kendall's Pharmacy has a very novel window. Take a look—it's worth it."

This brought a great many people into the store to ask whose idea it was, and for some unknown reason attracted the ladies especially. I thank you for the fine suggestion.

LIONEL F. MILLER.

Saranac Lake, N. Y.

'TWOULD TAKE A LOT TO FIX ALICE UP!

To the Editors:

Enclosed please find a note which I received a few days ago. I have seen a good many of this kind in

*Tchula Miss
Dr M P Winkler I am
Sore in from my head on
down in the inside
and under the side of my
eyes it sore and I cant
go to sleep and Ben that
has fat a month and
every one of my bones
I look like Iil coming
in to and please send
me a Serreon and my
something to eat it is
saint me and my
Stomach is out of order
Alice*

the BULLETIN and I think it deserves recognition among the other specimens. Incidentally let me say that I like the BULLETIN very much.

Tchula, Miss.

M. P. WINKLER.

SAPONIFIED COAL-TAR CREOSOTE.

To the Editors:

In looking through the last number of the BULLETIN I notice in answers to queries the suggestion to F. B. M. that he use liq. cresolis compositus for saponified coal-tar creosote.

While it is true that the official preparation of cresol is in a sense a creosote, I am inclined to believe that F. B. M. wants a product similar to that exploited by a number of firms as stock dips, etc. A preparation of this sort may be made with the following formula:

Ordinary lubricating oil.....2 parts.
Crude carbolic acid.....1 part.
Liquor cresolis compositus.....1 part.

This gives a product varying in content of cresylic acid from 15 to 20 per cent, depending on the strength of the carbolic acid. It mixes in all pro-

portions with water, yielding a milky solution which is reasonably permanent. The commercial product sold by most refineries is made with a rosin soap instead of the official article, which makes it much cheaper, but is not a very practical method for the average pharmacist. Incidentally this preparation may be made a profit-bearer for the druggist.

I hope this will answer the query and trust it may be of interest to other druggists who believe in originality.

JOHN C. ENDRESS.

Crown Point, Ind.

FROM ANOTHER EDITOR.

To the Editors:

I have no doubt that you have readers for all the features of the BULLETIN, but the one feature that interests me the most is the new series of "General Essays" in the back of the journal upon morals and manners by the editor. I want to suggest that you drop your modesty and put these disquisitions in "ten-point" instead of "eight-point" type.

Boston, Mass.

JOSEPH C. HAGAR,
Editor of *The Apothecary*.

IT STRUCK TWELVE!

To the Editors:

The publication of my article in the November BULLETIN entitled "Getting Business on Merchants' Booster Sale Days" proved to me that the BULLETIN OF PHARMACY has a wide circulation. I received requests for copies of the "Booster Sale Book" from all parts of the United States, as well as numerous letters from secretaries of merchants' business associations.

O. R. NORRIS.

Whitley, Indiana.

To the Editors:

I certainly think the BULLETIN OF PHARMACY takes the lead in style, information and all the points necessary to make up a fine trade paper.

Malden, Mass.

HORACE E. NEWCOMB.

* * *

To the Editors:

I can no more get along in the drug business without the BULLETIN than I can without my pharmacist's certificate.

CHAS. MINER,
Manager The Algonquin Pharmacy.

Sault Ste. Marie, Mich.

BUSINESS HINTS.

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Conducting a Professional Pharmacy.—

Elsewhere in this issue of the BULLETIN, in the "Hall of Fame," we are printing the portrait of W. C. Bender, of St. Joseph, Mo., and are also saying a few words about Mr. Bender's official positions in pharmacy. In this place it may not be uninteresting, in order to show what kind of a store

An Ethical Pharmacy

WE try to conduct a strictly Ethical Pharmacy. We do not make or recommend any patent medicine, but advise our patrons to consult a regular physician. ¶ So many times a physician is asked, "Where shall I take my prescription?" ¶ If you want just what your prescription calls for, quick service, as well as high-grade chemicals, remember

BENDER PHARMACY

Eleventh St. and Frederick Ave. Phones 700
Messengers on Wheels—Free Delivery

Mr. Bender conducts, to reproduce an announcement which he recently distributed to the public of St. Joseph. It was neatly printed on what might be called stationery stock, and was of such a size and shape that, folded once, it would go in a No. 6 commercial envelope.

A Druggist's Exhibit at a County Fair.—

W. E. Bingham, Tuscaloosa, Ala., is pretty well known to the N. A. R. D. membership throughout the country. He



is always to be found at the national meetings and usually acts in the capacity of one of the secretaries. The Bingham

Drug Co. turns out a number of specialties of its own, and Mr. Bingham believes in pushing these rather vigorously. At the county fair held at Tuscaloosa in October an exhibit of the Bingham preparations was made, and a view of this may be seen in the accompanying engraving. Among other products on exhibition were Bingham's Chill Pills, Bingham's Dyspepsia Remedy, and Bingham's Rheumatism Remedy. All of the Bingham preparations are guaranteed and are sold on the "your-money-back-if-not-satisfied" basis.

A Somewhat Unique Newspaper Ad.—

The two stores of the Gray & Worcester Co. of this city are now, and have been for several months or a year, a part of the group of thirty or more establishments controlled by the Louis K. Liggett Co. in the East. Readers of the BULLETIN will recall that Louis K. Liggett is the president of the United Drug Co. and that he formed a corporation to take over the retail stores which had been purchased from time to time by the Rexall people. The Gray & Worcester Co. are now running a series of newspaper ads. in the local papers, of which the accompanying reproduction is a specimen. The

[illegible]

original of this ad. occupied nearly a quarter page of newspaper space, and we have had to reduce it greatly in size in the preparation of our etching for the BULLETIN.

A Verse-writing Druggist.—

Fred W. Conrade has sent out an announcement informing the public of his immediate vicinity that he is back in business again at 1122 Linden Avenue, Chicago. The circular for the most part is given up to this statement, and Mr. Conrade tells his old customers that he will be glad to serve them again. Incidentally he inserts the following verse as being appropriate to the occasion:

Back to the farm is the talk of the day,
Back to the pharm-acy I've come to stay.
Back to the drug store I invite you to call,
Old ones, young ones, little ones and all.

CAPSULES OF SCIENCE.

Prepared by Prof. W. L. SCOVILLE.

Odds and Ends.—

E. Kazay says that artificial camphor has a single bond and natural camphor a double bond, which accounts for the difference in refraction and polarization of the two.

J. C. Umney says that oil of rose is very skilfully adulterated in such a way that chemical analysis will not show it. He believes that judgment on the delicacy and permanence of the fragrance is of great importance.

A special safe for keeping radium has been made for the British Radium Corporation. It required a 3-inch lead lining and a specially fitted door to keep the emanations inside.

Schering proposes to cure constipation by injecting a solution of digestive juices into the muscles of the patient. Such an injection causes peristalsis.

Water distilled from a copper still is said to have an oxidizing action, owing probably to minute traces of dissolved copper, which are too small to react to the usual copper reagents.

The decolorizing properties of fullers' earth, kaolin, and other clays is said to be due to the colloidal portion of the clay, which forms absorption compounds with the coloring matters.

Two to four per cent of powdered marshmallow root added to plaster of Paris will retard the setting of the latter (about an hour), but make a harder and tougher mass when finally set.

A French chemist says that yolk of egg develops a toxic body with age, which is not due to bacterial action.

About Emulsions.—

Two French chemists have been studying emulsions, and say that the rate at which an oil forms an emulsion and the stability of the emulsion increase as the surface tension of the neutral oil is lessened. Sodium or potassium sulphuricinate is a pronounced emulsifying agent because it materially reduces the surface tension of the oils and also the water, and in addition it favors hydrolysis of the oil. By prolonged agitation with pure water a stable emulsion can be formed with an oil, without any emulsifying agent being present, due to hydrolysis. The presence of mineral salts favors such an emulsion, but hinders emulsification with soap or gums. Fatty acids emulsify more easily than neutral oils, and make stable emulsions.

Gums emulsify by reducing the surface tension, and hold the emulsion by forming a protective coating about the oil particles.

Every solid or liquid substance which can be precipitated in very fine particles may act as an emulsifying agent, particularly if it reduces the surface tension of the liquids.

By the simultaneous use of colloids and of fine emulsions an oil is easily emulsified. Yolk of egg and milk are such agents.

When soap is used as an emulsifying agent it should be dissolved in the smallest possible amount of water, then the oil added gradually. Potassium soaps are better for emulsions than sodium soaps.

Whaddy Ye Know 'bout That?—

Prof. C. A. Herter has been studying the effects of sodium benzoate, and says: "There is no soluble substance that can be taken into the digestive tract which does not possess toxic properties in some degree when given in sufficient quantities or concentration. Sodium benzoate is no exception to this rule. This consideration, however, does not alter the fact that sodium benzoate used as a food preservative is singularly lacking in harmful effects on the human organism, and that ill effects from its reasonable use have not yet been demonstrated."

Biological Brass.—

In order to ascertain whether copper in minute quantities prevents the action of putrefactive bacteria, or only covers the putrefaction by destroying its odor and other evidences, A. Springer treated some eggs with copper solution until the copper could be detected in the albumin, then found that the eggs so treated would hatch. The copper therefore does not prevent normal development.

Better for the Gums.—

It is claimed that cocaine arabate is much better for hypodermic injections than cocaine hydrochloride because it is absorbed much more slowly, hence is less toxic, the action is more prolonged (about three times the duration), and it is less irritating. German patents have been taken out on its preparation.

Another Placebo.—

Prof. F. B. Power has made a thorough examination of pumpkin seeds and finds them to contain an oil, a trace of resinous matter and of salicylic acid. Neither the oil nor resin showed any physiological activity, and it appears probable that the use of pumpkin seeds as a vermifuge is without value.

Toxi-colloidal Lead.—

Pure water acts on lead quite rapidly in the absence of air, forming a colloidal solution of lead. On exposure to the air, lead oxyhydroxide is formed and precipitated, the latter being insoluble in water. The presence of salts in the water hinders, or may entirely prevent, this solvent action on lead.

The Wrong Polish.—

The Eastern Association of Tropical Medicine has decided that beriberi is caused by the continuous consumption of polished rice, which has been deprived of its pericarp and is deficient in phosphates. By using whole rice, or adding phosphates to the diet, the disease may be prevented.

Radiumized Glass.—

Glass is made to contain small amounts of radium sulphate, which is claimed to impart a permanent radioactivity to it, and make it useful for medicinal or scientific uses.

Wilful and Woful.—

The West Virginia gas wells are estimated to give out thirteen hundred million cubic feet of gas per day, of which three hundred million feet are wasted.

BOOKS.

CULBRETH'S MATERIA MEDICA AND PHARMACOLOGY.

While pharmacognosy and pharmacology are separate and distinct sciences, there have been attempts to cover both subjects in a single volume. An unusually successful effort of that kind may be seen in Culbreth's *Materia Medica and Pharmacology*.

This book, now in its fifth edition, furnishes a complete text for students and an encyclopedia of reference for physicians and pharmacists who wish to look up any point in the materia medica and pharmacology of the entire range of drugs covered in the United States Pharmacopœia. Professor Culbreth combines the qualifications of wide and accurate knowledge and skill in teaching. In this new issue he has embodied the vital changes in the U. S. P., made since the revision of 1905, which are difficult of access elsewhere, has scrutinized every page for possible improvement, and has included many new remedies of merit accepted by the medical profession. Among the notable additions may be mentioned the sections on the opsonic theory and radioactivity. Every line has been carefully reviewed with the object of incorporating the latest research and bringing the entire volume thoroughly abreast of its subject. The work is profusely illustrated. There are 986 pages with 487 illustrations.

The book is published by Lea & Febiger, Philadelphia and New York, and costs \$4.75 net in cloth.

THE NEW REMEDIES OF 1909-1910.

The number of synthetics and "new remedies" in general brought out every year runs up into the hundreds. Several books have been exclusively devoted to the subject and have from time to time been reviewed in these columns. Before the type is cold, however, additional substances are thrown upon the market, and the need therefore becomes apparent for supplementary literature. The American Druggists' Publishing Co. has just brought out a little paper brochure of 22 pages giving brief descriptions of the new remedies of 1909-1910 and containing prefatory remarks on the subject in general. We believe the price is ten cents.

PLANT ANATOMY.

The first edition of a volume on this subject, by William Chase Stevens, of Kansas University, was issued in 1907 and reviewed in the *BULLETIN* of January, 1908. The present edition does not differ in typography or dress from that of the first. The only difference in subject-matter is the inclusion of a chapter on reproduction, made necessary by the rapid strides of biological research on the subject of plant and animal breeding and their bearing on the problems of evolution. This chapter deals with the various processes through which the reproductive tissue passes from its origin to the completion of the reproductive body—the spore for ferns and the seed for the higher plants; also hybridization, Mendel's laws, chromosomes as bearers of heredity, character, etc. The chapter is illustrated with sixteen figures show-

ing various stages in the formation of the reproductive organs of both the flowering and non-flowering plants and showing the different processes through which the chromosomes have passed during a double nuclear division and the positions assumed. Stevens' *Plant Anatomy* is published by P. Blakiston's Son & Co., Philadelphia, and costs \$2.00 net.

DAGGETT'S PHARMACEUTICAL CHEMISTRY.

We have had pleasure in reading over the "Theory of Pharmaceutical Chemistry," by Charles H. Daggett, Ph.G., Ph.C., Professor of Theoretical Pharmacy and Organic Chemistry in the Rhode Island College of Pharmacy. In this volume Professor Daggett has collected and systematized a mass of special information which heretofore could only be acquired by an extended search through numerous works of reference, a task calling for an expenditure of patience and labor. The author's long experience as a teacher of this special branch of pharmaceutical knowledge is a satisfactory earnest that the subject has been handled with intelligence, lucidity, and completeness. The book is visibly intended to explain the Pharmacopœia, and to that end the sections on both inorganic and organic chemistry have been adapted.

The publishers are Lea & Febiger, Philadelphia and New York. Cloth, \$2.75 net.

STATE PURE DRUG LAWS.

The National Wholesale Druggists' Association has published a new edition of the pamphlet containing a synopsis of the State pure food and drug laws enacted since the passage of the Federal act. The present book covers all of the new statutes up to September, 1910, and it also includes the narcotic laws of the different States, the Massachusetts wood alcohol law, the New York ant substitution law, and certain other measures. These pamphlets are gotten out by the N. W. D. A. for the use of its members, and we are not prepared to say whether they would be sent upon request to others. At any rate, the books are very valuable ones. They are issued from the office of the secretary—J. E. Toms, 81 Fulton Street, New York City.

E. MERCK'S ANNUAL REPORT.

Recent advances in pharmaceutical chemistry and therapeutics are well set forth in E. Merck's Annual Report. Remedies of modern introduction are described and very often the medical properties are given at some length. Atoxylic mercury, for example, is mentioned, with a discussion of its pharmacological action on the lower animals and its clinical effects on the human. The book obviously aims to give the chemical nature of the newer remedies together with a brief résumé of their medical properties. New uses for the older chemicals are also suggested. Several pages are devoted to serum therapy, and therapeutic preparations made from bacteria. E. Merck's Annual Report comes from the chemical works of E. Merck, Darmstadt, Germany.

PRACTICAL PHARMACY.

A condensed work on this subject has recently been completed by Birdsey L. Maltbie. It is not intended to replace the larger and more complete books, but to afford the

student a course of study by which he may master the subject in an elementary way. The author believes that physicians and medical students in particular will find in this book all of the necessary knowledge of pharmacy in a form that will be readily understood without explanations by a teacher. Maltbie's Practical Pharmacy contains 432 pages and costs \$3.00 in cloth. It is published by the Physicians' Drug News Co., Newark, N. J.

FOR THE PHOTOGRAPHICALLY INCLINED.

The "Welcome" Exposure Record includes descriptions of negative making, factorial, time, machine, tank or stand development, color photography, bromide printing, gaslight printing, lantern slide making, toning, intensification, ozobrome and bromoil. Ample provision is made for notes and memoranda, and the book is bound in neat pocket-book form, with a pencil, automatic catch, and wallet, so that it may conveniently become the photographer's companion on all excursions and obviates the necessity for any other notebook. It may be obtained from all photographic dealers and booksellers and at all railway bookstalls. The price in the United States, exclusive of postage, is 50 cents.

TWO CALL LISTS.

We have recently received from the publishers copies of two standard physicians' call lists, both gotten out for 1911. The Physicians' Perfect Call List and Record is published by E. G. Swift, Detroit, Mich. The Physicians' Visiting List is issued from the press of P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia. Both books are doubtless familiar to our readers, and both have commended themselves year after year to the physicians of the country.

THE SERVICE DEPARTMENT

In this new department of the BULLETIN the market wants are indicated of those subscribers who are not able to find what they desire, and who are anxious to be put in touch with sources of supply. In some instances we have brought inquirer and manufacturer together, but in all cases it would pay other manufacturers to follow up the clues here given. We shall be glad to furnish the full name and address of any inquirer to producers or distributors who write us for this information. Readers of the journal on their part are earnestly requested to send us a description of their wants: we are anxious to make this department as valuable as possible to them all.

A New Store with a Doctor's Office in the Rear.

28. The K. Pharmacy writes: "We are going to have a new store building erected and would like to have some plans submitted for an up-to-date establishment with a doctor's office in the rear. We want two show windows with double doors in front, and we shall carry about \$5000 worth of stock. Can you refer this request to some firm that can make good plans for us and fit us out properly?"

Correspondence Course in Pharmacy with a Degree.

29. C. E. M. asks where he can take a correspondence course in pharmacy that will give him a degree—Ph.G., Ph.C., or P.D. He is already registered, but he wants to brush up on his pharmacy and to get a title.

Linoleum for a Store.

30. G. S. is in need of some linoleum for his drug store floor, which is presumably pretty liberal in size. He would like to be put in touch with houses where a good price could be secured on this material.

Scales for Customers to Weigh Themselves On.

31. V. W. E. thinks he would like to install scales in his store which his customers could use for the purpose of weighing themselves. He would like to know where such an outfit could be purchased to advantage. He has in mind a scale that is also provided with a sliding rod employed to measure a person's height, so that both height and weight could be gotten from the same instrument.

Agents for "606."

32. G. W. C. wants to know where Ehrlich's "606," otherwise known as Salvarsan, can be purchased. We may say that we have had several inquiries of this sort and have always replied that the American agents for this remarkable chemical are Victor Koechl & Co., 122 Hudson Street, New York City. It was first announced that the product would be put on the American market by the first of November, but the date was afterwards changed to the first of January. If in fact it is not yet available, it doubtless will be quite soon. Information concerning it can be secured from the Koechl firm, and in the meantime we call attention to the fact that an editorial and a contributed article on the subject appear in this issue of the BULLETIN.

Container for a Corn Cure: The Manufacturers of Santal Midy.

33. V. DeP. Q. announced last month in this department that he wanted something in the way of a container for a liquid corn remedy in which a camel's-hair brush was attached to the cork. P. J. Nolan of Ottawa, Canada, offers the information that he puts up a salicylic acid and collodion corn cure which is one of his leading sellers. He gets 25 cents for it. The container is a half-ounce green bottle with a glass spatula attached to the cork, and the bottle is encased in a carton. The packages are purchased from Rougier Freres of Montreal, Canada, at \$3.50 a hundred. Mr. Nolan says that he has used the camel's-hair brush attachment, but that it has decided disadvantages. The brush gets unwieldy and dirty. The glass rod idea, on the other hand, is very satisfactory.

Mr. Nolan also volunteers the information that Santal Midy is a French preparation put up by Grimault & Co., Rue Vivienne, Paris, France, and it can be purchased from any of the wholesalers. The price in Canada is \$9.50 a dozen less 5 per cent for 30 days. We had already given this information direct to E. K. H., but it will do no harm to repeat it on this occasion for the benefit of other readers.

QUERIES.

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

A Quince-seed Lotion.

W. C. H. writes us as follows: "I prepare a hand lotion which I got out of an old copy of the BULLETIN. It makes a very nice preparation, but I have always had a good deal of trouble in preparing it, especially in getting the quince-seed mixture strained well. What is the best way to prepare and strain the quince-seed? The directions say 'steep the quince-seed in boiling water,' of which the formula calls for 5 pints; then it says dissolve the borax, etc., in the balance of the boiling water. Now what do you do—use all the boiling water for the quince-seed or only part of it? What is meant by 'steeping' the quince-seed? I take it that it means placing it on a slow fire and keeping it well heated, but in this case I find that it turns brown. Is it not better to place the seed in the boiling water and then let it stand for three or four hours? How would you suggest straining the quince-seed mixture so as to get it perfectly clear? I have tried running it through cloth, cotton, etc., but without success.

"If you know of a similar formula, but one that could be more easily prepared, please advise me."

Your trouble may be due to the quince-seed. It is probably dirty. Wash the seeds two or three minutes in cold water. That will remove the dust, which otherwise will pass through the strainer and spoil the decoction. Next dissolve the boric acid in the cold water and pour the solution on the seed and let the mixture stand over night. Warm water is apt to induce fermentation. In the morning strain through a bolting cloth of about 100 meshes. Then add the glycerin, perfume, and alcohol which may be needed.

Jacob J. Franz makes a toilet lotion containing quince-seed which he calls "cream of roses." It is used on rough skin, chapped hands, etc.:

Quince seed	3 ounces.
Alcohol	16 ounces.
Carbolic acid	10 grains.
Oil of rose .....	.20 minims.
Boric acid	1 ounce.
Glycerin	4 ounces.
Distilled water, to make.....	8 gallons.

In the water dissolve the boric acid, carbolic acid, and glycerin. Macerate the quince seed in this mixture for 24 hours. Strain the cream through fine muslin several times. Dissolve the oil of rose in the alcohol and mix in the rest of the mixture. Add 15 drops of carmine solution.

Put up the mixture in 2-ounce packages and retail for 25 cents.

To Prevent Frosting and Steaming of Windows.

H. E. L.—Frosting of windows is best prevented by some system whereby cold air circulates near the glass. When the construction of the window does not permit open-

ings to be made at its top and bottom into the outer air, holes should be bored through the floor of the window. Under these holes a box should be built with openings into the cellar. In the box should be placed an electric fan so set as to create a current of cold air along the window glass when in action.

Frosting and steaming may to some extent be prevented with the following mixture applied to the glass:

Soft soap.....	2 pounds av.
Glycerin	1 pound av.
Oil of turpentine.....	sufficient.

Melt the soft soap in the glycerin with the aid of a gentle heat, and add enough oil of turpentine to give the mixture the consistency of a heavy syrup.

This should be applied to the entire inner surface of the glass by using cloths saturated with it. A thin film should be left on the glass, and rubbed off and renewed as needed.

Another plan is to apply diluted alcohol containing 5 to 10 per cent of glycerin. This will prevent steaming and subsequent frosting of show windows.

Baking Powder.

H. H. E. writes as follows: "Please supply me with the formula of tartaric acid baking powder. There are such products on the market. I desire particularly to find out the amount of tartaric acid needed to take the place of potassium bitartrate in the so-called pure baking powders."

M. J. Jones, of Rochester, N. Y., writing in *The Apothecary*, offers a formula which in his opinion produces the best baking powder that can be made. He says that it conforms with the pure food laws and equals any high-price powder in the world:

Pure grape cream of tartar.....	3 pounds.
Sodium bicarbonate (baking soda)....	1½ pounds.
Corn-starch	1½ pounds.
Tartaric acid	1 ounce.

Use two teaspoonfuls to one quart of flour.

It costs 15 cents a pound to make the powder and it sells for 35 cents.

If you insist on a formula without cream of tartar, we submit the following:

Tartaric acid	18 ounces.
Sodium bicarbonate.....	20 ounces.
Ground rice.....	2 or 3 pounds.

Cream of tartar is better than tartaric acid, and we prefer the first formula for that reason. Powders containing cream of tartar keep longer. Secondly, in the dough they evolve carbonic-acid gas more slowly and steadily than tartaric acid powder. The first point is one to which compounders of baking powders should pay particular attention, for although they may provide the cook with an article which is beyond praise when made, as soon as the box or packet is opened moisture is absorbed, the contents deteriorate, and by the time the last is used little carbonate is left.

Dissolving Rubber.

A. H. R.—How can I make a solution of rubber which will adhere to articles dipped in it?

To dissolve india-rubber or gutta-percha in chloroform or benzole is usually attended with so many difficulties and drawbacks that in nine cases out of ten, says the *British*

Journal of Photography, where the solution is required the experimentalist usually purchases it ready made. But there need be no difficulty about the matter. First, pure rubber should be obtained. When vulcanized, it is perfectly insoluble. Secondly, pure solvents are necessary. Chloroform containing a large excess of alcohol and water will fail to act even upon the purest rubber. Again, under the most satisfactory conditions, the action is very slow, and the amount of rubber capable of being taken up is proportionately very small. The plan usually adopted is to place a large amount of shredded rubber in a bottle, which is then filled up with the solvent, and shaken at intervals a few times; and when the threads do not dissolve like pieces of sugar the whole is thrown aside, and we are written to for an explanation of the failure. If a small quantity of rubber had been placed in the bottle, and the liquid added, it would have been observed gradually to swell out very considerably after the lapse of some time, and a mixture of the whole would be facilitated by stirring with a glass rod or a splinter of wood. The rapidity with which the rubber absorbs the solvent will depend upon its condition; but the action is never very quick, nor is it in any way analogous to the dissolution of a crystal.

One cause of the failure of chloroform to act upon the caoutchouc may arise from the presence of alcohol in too great a proportion. Chloroform as sold almost always contains alcohol in small quantity, owing to the fact that when none is present it cannot be prevented from decomposing spontaneously, more especially in the light. It is, however, stated that when entirely protected from light absolute chloroform will not undergo any change.

Invisible Ink.

B. R.—Invisible or sympathetic inks are fluids used for writing purposes, the characters made with them being invisible, but becoming visible upon the application of heat or of some suitable reagent. Writing made with those inks which becomes visible upon the application of heat, again becomes invisible upon cooling; on the contrary, writing developed by chemical action remains permanent. Here are three formulas:

- | | |
|--------------------------|---------------------------|
| (1) Cobalt chloride..... | 150 grains. |
| Glycerin | $\frac{1}{2}$ fluidrachm. |
| Water | 3 fluidounces. |

Mix and dissolve the ingredients.

The characters traced with this ink become blue on gently heating the paper.

- | | |
|-----------------------|----------------|
| (2) Linseed oil..... | 25 minims. |
| Water of ammonia..... | 1 fluidounce. |
| Water | 5 fluidounces. |

To make the writing or the drawing appear which has been made upon paper with the ink, it is sufficient to dip it into water. On drying the traces disappear again, and reappear on each succeeding immersion. The mixture must be agitated each time before the pen is dipped into it, as a little of the oil may separate and float on top, which would, of course, leave an oily stain upon the paper.

(3) Write with tincture of iron chloride, diluted with 10 parts of water, and develop with a blotter moistened with a solution of tannin or decoction of nutgalls or strong tea. This may be reversed by writing with a decoction of nutgalls and developing with the blotter moistened with tincture of iron. The characters when developed are black. Instead of using nutgalls to develop the iron, potassium, or ammonium, sulphocyanide solution may be employed. The writing will then appear red.

Mirror Silvering.

H. A. L.—Mirror silvering is sometimes a misnomer, inasmuch as the coating applied to glass in the manufacture of mirrors does not always contain silver. In formula 1 it is an amalgam of mercury and tin.

1. A sheet of pure tin-foil, slightly larger than the glass plate to be silvered, is spread evenly on a perfectly plane stone table having a raised edge, and is well cleaned from all dust and impurity. The foil must be free from the slightest flaw or crack. The tin is next covered uniformly to a depth of one-eighth of an inch with mercury, preference being given by some to that containing a small proportion of tin from a previous operation. The glass plate, freed from all dust or grease, and repolished if necessary, is then carefully slid over the mercury. This part of the work requires skill and experience to exclude all air bubbles, and even the best workmen are not successful every time. If there is a single bubble or scratch the operation must be repeated and the tin-foil is lost—not a small expense for large sizes. When this step has been satisfactorily accomplished the remainder is easy. The glass plate is loaded with heavy weights to press out the excess of mercury, which is collected and is used again. After twenty-four hours the mirror is lifted from the table and placed on edge against a wall, where it is left to drain well.

This formula is of course taken from the literature. We submit it for what it may be worth, for the subject is somewhat without our province.

Floor Oils.

J. W. L.—So-called "floor oils" are various oily mixtures, such as the following:

1. Neatsfoot, cottonseed, and yellow paraffin oils, each equal parts.
2. Paraffin oil, 8 parts; kerosene and lime-water, each equal parts.
3. Fish oil, 8 parts; paraffin oil and lime-water, each 1 part.

These are to be brushed on the floor, or they may be applied occasionally by means of a mop. They are supposed to prevent the dust from rising.

While these mixtures when applied to floors naturally prevent, to an extent, dust from rising, they have some ob-



A GROUP OF PARKE-DAVIS MEN.—This picture was snapped at the Dallas meeting of the National Wholesale Druggists' Association in November, and we are reproducing it through the courtesy of the *Southern Pharmaceutical Journal*. All five men are from the house of Parke, Davis & Co. Reading from the left they are: S. G. Steiner, Manager of the New Orleans branch; J. S. McCauley, Texas traveler; Ernest G. Swift, General Manager; B. A. Parsons, Manager of the Kansas City branch, and Harry Skillman, Advertising Manager.

jectionable qualities. Nos. 2 and 3, for example, have the odor of kerosene and fish oil. The greasiness or non-drying property is also objectionable, as this may do damage to rugs, carpets, clothing, etc. The customary way of oiling floors is to apply boiled linseed, preferably mixed with some of the turpentine or japan dryer. This dries to a tough, resinous coating without any greasiness. Another method of oiling floors is with a solution of wax in oil of turpentine.

Free Iodine Liberated.

R. S. T. writes us as follows: "Kindly criticize the following prescription. What is the best method of overcoming the incompatibility between the potassium iodide and spirit of nitrous ether? If dispensed as it stands would the separation of iodine be injurious to the patient?"

Solution of ammonium acetate.....1 ounce.
Spirit of nitrous ether.....4 drachms.
Potassium iodide.....25 grains.
Syrup of squill.....1 ounce.
Syrup of tolu, enough to make.....4 ounces.

Sig.: 1 drachm every two hours.

The spirit of nitrous ether is generally acid in reaction, and when an acid solution of nitrous ether is brought in contact with potassium iodide, iodine is liberated and the gas, nitric oxide, is formed. This prescription should not be filled on account of the free iodine formed.

The Acetylene Generator on an Auto.

C. W. T. submits an interesting query. He writes: "I have had several requests from automobile owners for my opinion as to the advisability of using alcohol in an acetylene generator. I do not believe it is the proper thing, but I desire to ask your advice on the subject."

Evidently our friend's customers have reasoned that since a mixture of water and alcohol does not freeze in the radiator of an automobile, it would be equally advisable to use alcohol and calcium carbide in the gas generator—an erroneous inference. Alcohol cannot be employed to generate acetylene gas from calcium carbide. A saturated salt solution is said to work, although we have never tried it. Water is of course the thing usually employed to generate the gas, the reaction being represented by the following equation: CaC_2 plus H_2O equals C_2H_2 plus CaO . In a generator the water is kept separately from the carbide and added only as the gas is consumed. Alcohol will not supplant the water, because it will not cause the same chemical reaction.

Blue-black Ink.

S. B.—The following formula is from the *Pharmaceutical Journal*:

Gallic acid 60 grains.
Ferrous sulphate 100 grains.
Diluted sulphuric acid..... 4 drachms.
Gum arabic 200 grains.
Liquefied phenol 30 minims.
Glycerin 140 minims.
Phenol blue, FFF..... 16 grains.
Distilled water, enough to make..... 20 ounces.

Dissolve the ferrous sulphate, gum arabic, liquefied phenol, glycerin, and diluted sulphuric acid in 8 ounces of the distilled water, without heat. Then dissolve the gallic acid in 5 ounces of the distilled water with the aid of a gentle heat; continue the heating until the liquid

just begins to boil, and add to it gradually the solution containing the ferrous sulphate, etc., shaking after each addition. Make up to the required volume (20 fluidounces) with distilled water, filter, and add the phenol blue, shaking until it is dissolved.

For use in fountain pens the gallic acid may be increased to 80 grains, the ferrous sulphate to 120 grains, and the phenol blue to 20 grains, and the gum arabic reduced to 160 grains.

Foaming Hair Tonic.

G. P. H. wants the formula of a foaming hair tonic.

The following preparation is said to be satisfactory. Suppose you use it, adding to the mixture enough fluidextract of soap-tree bark to obtain the foaming property desired:

Resorcin 2 drachms.
Tincture of cantharides..... 4 drachms.
Castor oil 1 drachm.
Spirit lavender compound..... 4 drachms.
Glycerin 4 drachms.
Best imported bay rum, enough to make.... 1 pint.

Separate the hair with the fingers, morning and night, and rub about a teaspoonful into the scalp. It will not harm the hair, but the medication does its work on the scalp, and an endeavor should be made to apply it there. After about a week the hair will become unpleasantly oily. When this occurs, wash the hair well with the white of an egg, followed by soap and warm water, and finally by plain water. Repeat the washing as often as the hair becomes oily, and the dandruff will soon disappear.

After a few weeks' use the preparation may be discontinued, and the cure will usually be complete. But if there is any sign of a return of the trouble, an application once or twice a week will keep the dandruff in permanent subjection.

An Elixir of Iron, Quinine and Strychnine.

M. J. B. writes: "Will you please give the proper method of compounding the following formula to make a clear mixture? It precipitates:"

Quinine sulphate..... 1 drachm.
Strychnine sulphate..... 1 grain.
Tincture iron chloride..... 5 drachms.
Diluted phosphoric acid..... 2 ounces.
Syrup of lemon, enough to make..... 6 ounces.

Dissolve the quinine sulphate in the diluted phosphoric acid. Dissolve the strychnine sulphate in this solution; add the tincture of iron chloride and enough syrup of citric acid to make 6 ounces.

Colors for Mouth-washes.

L. A. N.—Here are some coloring agents for mouth-washes. They are suggested by the *National Druggist*:

Bright red.....tincture of cochineal.
Reddish-brown.....tincture of cudbear.
Brown.....caramel solution.
Golden yellow.....tincture of saffron.
Green.....chlorophyl solution.

Naphthol Ointment.

E. D. D. writes: "I have a prescription for 2 ounces of betanaphthol ointment. How many grains of betanaphthol should I use per ounce, and what base?"

Naphthol ointment (Kaposi's ointment) is made as follows:

Betanaphthol 60 grains.
Lard 1 ounce.

Mix.

GENERAL ESSAYS.

PUNISHING THE INNOCENT.

BY HARRY B. MASON.

Few people believe any longer in Adam and Eve and their Garden of Eden. First the doctrine of evolution, next the science of geology, and finally the actual discoveries of archeologists indicated beyond question that the world had its beginning millions of years before Adam and his consort were supposed to have been suddenly created for the purpose of starting civilization on its long journey down through the ages.

But while the Eden incident is now recognized as purely legendary, the fundamental thought which it represents still clings to us with a grip that is almost fatalistic. I refer to the Fall of Man theory—the doctrine that because “the first man” and “the first woman” sinned, their descendants unto the farthest generation shall also by a species of cruel vicariousness be considered sinners until they have purged themselves of their awful heritage. In other words, they are deemed guilty until they have proved themselves innocent, and the burden of proof rests heavily upon them.

Every thinking man discards such a notion with contempt and indifference, and fortunately our theological creeds are placing less and less emphasis upon it. But after all this absurd and perverted kind of reasoning seems to be characteristic of human nature. It is instinctive. It is inherent. It will persist long after logicians and philosophers have proved the utter unreason and injustice of it.

Modern manifestations of this type of imitative mob logic abound on every hand. The sins of one man are held to be the sins of other men. The crimes of a small minority are unconsciously believed to be the crimes of the great majority. The offenses committed by a few representatives of a class are assumed to be the general offenses of the class as a whole. Everywhere the many are punished for the sins of the few.

Let us glance at instances familiar to all of us:

A few negroes assault white women, and the whole race is at once deemed to be composed of rapists and criminals and is hunted down with hungry and savage vengeance. A few Russian Jews are suspected of crimes against children, and at once a Kishenev massacre breaks out and sickens the whole civilized world with its horrible brutalities. A Chinaman in New York perpetrates an awful murder, and with one voice the country declares that all Chinamen are a disgrace to civilization and should be driven out of the country. A few druggists do a shameful and illegitimate business in liquor and narcotics, and the belief becomes widespread that all druggists are nothing but saloon-keepers and “dope” sellers in disguise. A few physicians lower their noble calling to the dust, and some one writes a book entitled “Medical Graft and Crime” charging the whole profession with an equal measure of guilt. A few married men violate the law of marital fidelity, and the world declares that no man can be wholly trusted and that every man must entirely abstain from even pure companionship with other

women than his own wife under penalty of bringing himself and them under suspicion and even disgrace.

An indefinite number of similar cases might be cited—but why pile evidence upon evidence? It might be pointed out, for instance, that all stage folk are deemed to lack virtue because some of them stray from the straight and narrow path, and that all politicians are considered crooked because a minority indulge openly or secretly in graft and plunder.

But why, I repeat, multiply instances of this sort? They abound on every hand. They are familiar to all of us. And they prove the statement that everywhere and always, in the public mind, the sins of the few are visited upon the heads of the many. On all sides we are surrounded by artificial barriers and conventions; our liberty is interfered with; our inherent right to independence of action and even thought is denied us—and all for the reason that an illogical, unthinking and suspicious world cannot trust us and deems us all sinners because a few of us are. Men of independence, conscious of their own rectitude and dignity, may refuse, and I think should refuse, to recognize these barriers and conventions. Such men may compel the world into silence by sheer force of character, but after all they are taking chances, and too often, like the lion trainer, they are caught off their guard and attacked fatally before any chance is afforded to defend themselves.

The difficulty is that the fundamental principle alike of American law and human justice, namely, that a man or a class of men shall be considered innocent until proved guilty, is flouted by society itself, and there is set up in its place the cruel and unjust principle that every man, every woman, every class, every race must be under suspicion until proof to the contrary is overwhelming and utterly impossible of doubt. Few people think for themselves about it—they simply follow the majority like a lot of animals. Those with powers of independent thinking refuse to be coerced, but nearly all of us rush pell mell after the crowd, apparently deeming it a crime to do our own thinking and use our own brains.

I am an optimist. I know the world is getting better and broader generation by generation. But I am sometimes forced to the conviction that we have a long road to travel yet before we reach the goal of perfection set up by the evolutionary philosophers. Every day we are proving the soundness of Darwin's theory regarding our common ancestry, and many centuries will yet elapse before the characteristics of the imitative monkey are refined out of our systems.

How Lamro, a thriving town in the Rosebud country, South Dakota, was recently moved across the prairies to Winner, is told by Mary Isabel Brush in *Harper's Weekly*. “More than fifty substantial buildings, some of them as large as fifty by ninety feet, were dragged across the prairie, among this number being a bank and a hotel and about one hundred private residences. Seventy-two horses were used to move the hotel, and two steam-engines were used for others of the buildings. The transplanting of Lamro is said to be the most pretentious piece of work of the kind ever attempted.”

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THE MONTH'S HISTORY.

THE FOSTER ANTI-NARCOTIC BILL.

Of chief interest last month was the Foster anti-narcotic bill before the National Congress. All branches of the drug trade were considerably worried over this measure. It is practically a duplicate of the Cullom bill introduced in the Senate last year, and its purpose is to put all narcotics on a revenue basis.

The narcotics involved would be opium, morphine, coca leaves, cocaine, alpha- and beta-eucaine, chloral, cannabis, and their salts, derivatives and preparations. Importers, manufacturers, and wholesalers would pay a tax of \$10 a year, and retailers a tax of \$1. In addition to this all classes of deal-

ers would be bonded and would be made to keep detailed records of all transactions. An internal revenue tax of five cents a pound or fraction would be imposed on opium, chloral and cannabis, and one cent a pound or fraction on coca leaves, and stamps indicating the payment of this tax would be affixed to and canceled on every package.

Convictions under this law would mean a fine of not less than \$500 nor more than \$5000, or an imprisonment of not less than one year or more than five years, or both, at the discretion of the court.

* * *

GRAVE OBJEC- TIONS TO IT.

It would seem that practically all of the interests in the drug trade were opposed to the Foster bill except the Legislative Committee of the N. A. R. D., the chairman of which, Mr. Richardson, was, at least earlier in the month, in favor of it. Retailers in general protest that they would be subjected to an annual tax of \$1 and an annual bonding fee of \$6 or \$8; that they would have to be subjected to the very great inconvenience of affixing stamps on every package or prescription containing the least quantity of any of the narcotics; that even things like paregoric or a corn cure containing cannabis would be involved; that the record of sales would be an enormous burden; that the red tape would be incalculable; and that all of this would result in very little benefit to the public.

The manufacturers and jobbers protest, on their part, that the law would tie them up with restrictions even more onerous in character, and that the penalty for an unintentional violation of the statute would subject them to a fine out of all proportion to the offense. Thus, for instance, since sales are restricted absolutely to tax-paid and bonded dealers, the jobber who unwittingly sold a narcotic to any druggist who had not qualified would be open to prosecution. At the hearing last month the jobbers asked that the bill be greatly simplified and that

for the present it be confined, if not to cocaine, at least to two or three narcotics, until it can be seen from experience how the revenue system works out.

It must be understood that the sole purpose of the Foster bill is to provide a system of tracing the sales of narcotics in order that the facts may be available when the violation of State anti-narcotic laws is suspected. It is primarily a detective measure. A singular thing about the bill is that no provision is made at all for the sale of narcotics to any one but the several classes of bonded dealers. The only ultimate consumers who may purchase the drugs are public hospitals and scientific institutions. Not even physicians' prescriptions are exempted, or for that matter physicians themselves.

How the druggist would be permitted to dispense narcotics at all is a mystery, for it must be realized that this is a *revenue* measure, not an interstate commerce act, and that it therefore extends its jurisdiction to *every* sale of a narcotic wherever made, regardless of whether or not the sale is completed entirely within the borders of any sovereign State. In this respect the measure is entirely different from the food and drugs act, which affects interstate operations only.

* * *

A FRIENDLY SUIT.

An interesting situation has arisen in Pennsylvania. In that State the food and drug law is the practical duplicate of the national act. The Board of Pharmacy, however, in the enforcement of the law, has drawn up regulations which in some particulars go beyond the national regulations, and which the manufacturing houses deem to be unwarranted by the law itself. The board desires, for instance, that labels shall contain detailed statements which are not required by the government or by the other States, and which the manufacturers declare would necessitate the preparation of particular labels for Pennsylvania, and would cause great confusion and annoyance without any compensating benefit.

Fortunately, however, the Board of Pharmacy and the manufacturers have gotten together agreeably and have decided to conduct a "friendly suit" to test the legality of the Board's rulings and regulations. In accordance with this arrangement Parke, Davis & Co. and Sharp & Dohme have authorized their local agents in Philadelphia to sell packages of certain products to the Board, and suit has been brought. If the court holds that the

Board has gone beyond its powers and has in effect sought to enact new legislation, the manufacturers will be exempted from trouble in the future. If, on the other hand, the court supports the Board there will be nothing for the manufacturers to do but to subject themselves to the expense and inconvenience of preparing special labels for the State of Pennsylvania.

The erroneous inference has crept into some of the reports that the action brought by the Board involves the character of the medicaments sold by the two houses, but this is entirely false and unjust. No suggestion of adulteration is involved at all. It is merely a technical question of labeling—merely a question of whether the Board or the manufacturer is right in the interpretation of the law. In this rapidly developing era of food and drug legislation it is important that agreement be reached on technical details so that all concerned will know exactly what the laws mean. For this reason decisions on a number of moot points cannot be rendered any too soon to clarify the atmosphere.

* * *

CO-OPERATIVE ADVERTISING.

An advertising method evolved by the Chicago Retail Druggists' Association has attracted considerable interest. The association is running a series of ads. in one of the Chicago daily papers, after which the matter is reprinted on counter wrapping paper and used by the members of the association in their stores. For the most part, if not altogether, the advertisements are in the form of solid text matter, and they take up and explain various features of the retail drug business in such manner that the pharmacist is set right before the public. Thus the scheme resolves itself into a sort of educational campaign, and the benefits are perpetuated by the system of having the same ads. used afterwards by the individual druggists. In this way the cost for each member of the association is very slight, and the wrapping paper is furnished for little more than the plain material would cost.

It would appear, however, from the report of the Executive Board, read at the recent annual meeting of the C. R. D. A., that while everybody has united in eulogizing the plan, the members themselves have not taken sufficient advantage of it. The chairman of the board, C. P. Crowley, declared that "unless the druggists take hold and place these reprints in their stores I shall oppose the continuance of the

work." Mr. Crowley added: "In my opinion you have a great opportunity here if you will avail yourselves of it."

* * *

H₂O₂ IN GENERAL STORES.

The Kansas State Pharmacy Board proposes to begin warfare on department stores in the large towns of Kansas which sell chemicals and patent medicines without employing registered pharmacists.

The first test case will come probably in Lawrence on peroxide of hydrogen. Mr. Dick, of that place, representing the Pharmacy Board, submitted the matter to the attorney-general and got an opinion that it was a violation of law for any one but a registered pharmacist to sell that chemical. Most of the department stores handle the article, and the attorney-general authorized Mr. Dick to arrest some storekeeper to make a test. He felt sure the Board would be upheld by the courts.

"We propose to make the department stores either hire registered pharmacists to handle their chemicals, patent medicines and drugs, or else quit selling them," said Dick. "The law requires a pharmacist to have four years' experience in order to equip himself. Now, after he does go to that expense, he should be protected. And the State Board will do it."

This effort to limit the sale of hydrogen peroxide to registered pharmacists may possibly succeed in Kansas, but it is quite significant that the same issue has just been decided in the courts of New York State adversely to this contention. There the courts have decided that hydrogen peroxide in original packages is not a drug within the meaning of the law, and that it can therefore be sold by general dealers.

* * *

FOOD AND DRUG CASES IN 1910.

That the national government has been pretty busy in the enforcement of the food and drugs act appears from the annual report of Secretary Wilson. During 1910 no fewer than 990 cases were reported to the attorney-general—766 as the basis for criminal action, and 224 for seizure proceedings. Up to the close of the year there had been 246 convictions, while verdicts for the defendants had been rendered in only three cases.

Still more impressive is the statement that samples of importations of foods and drugs were examined to the number of 95,482. That only about

3000 of these specimens were found to be illegal indicates that considerable good work has been done at the ports of entry in forcing an improvement in the character of importations. At the present time laboratories are in operation at 21 ports of entry.

* * *

A RECENT CONVICTION.

Constant reminders of the government enforcement of the food and drugs act are the "Notices of Judgment" which are issued in batches of a dozen or fifteen with surprising frequency. They pour into the BULLETIN office in far greater numbers than we can possibly comment upon, but we may say that among the recent cases which have attracted most attention are those against the Munyon Co.

Prof. E. A. Ruddiman, of Nashville, well known to pharmacists, testified in the Munyon cases that he found little else but sugar in some of the Munyon remedies, and the government argued that under the circumstances it constituted misbranding to claim for these preparations that they were "cures" of certain ailments. The company pleaded guilty, and the maximum fine of \$200 was imposed on each of the three bills of indictment—\$600 in all.

* * *

THE INSECTICIDE LAW.

The national insecticide act became effective on the first of January, and regulations for its enforcement have been issued at Washington. The government has evidently profited by its experience with the food and drugs act and has succeeded in having embodied in this new measure some of the features absent from the other one. Thus, for instance, the term "label" is so defined as to include any circulars that may be packed with the article. Again, if the contents are stated in terms of weight or measure, they must be correctly stated—a provision which Congressman Mann, it may be said parenthetically, is now endeavoring to have incorporated in the food and drugs act as an amendment.

Under this insecticide law Paris green will be considered adulterated if it does not contain at least 50 per cent of arsenious oxide. It must not, however, contain arsenic in water-soluble forms equivalent to more than 3½ per cent of arsenious oxide, and no substance may be mixed with it to lower its strength. Lead arsenic will be considered adul-

terated if it contains more than 50 per cent of water, or if its total arsenic content is equivalent to less than $12\frac{1}{2}$ per cent of arsenious oxide. Standards are established for other insecticides, but we fear they are not of sufficient practical interest to our readers to warrant mentioning them at length.

* * *

SALVARSAN DISCUSSED.

It is gratifying to note that pharmaceutical associations here and there are exhibiting a lively interest in the subject of Salvarsan or "606." Thus we find that the Chicago and Philadelphia branches of the A. Ph. A. have recently had symposiums on this remarkable remedy, and we might add that in no way can professional pharmacists better commend themselves to the medical profession than by making a close scientific study of new developments of this kind. The BULLETIN, for its part, has sought to assist in the educational process as quickly and as successfully as possible. We have had several editorials and pharmaceutical notes on Salvarsan. Last month we published an excellent article by Mr. Dunning, entering into the practical details of the subject, and a further contribution from Mr. Dunning will be found in our department of "Letters" in this issue of the BULLETIN. The preparation of the Salvarsan solutions is attended with a good deal of care and difficulty, and Mr. Dunning's articles are the best that we have yet seen on the subject.

* * *

WANTED: AN EDITOR!

The death of Professor Hallberg has thrown into more or less confusion the plan of the A. Ph. A. to begin in July the publication of the "Journal of the A. Ph. A." to succeed the present "Bulletin." The importance is keenly realized of securing an editorial successor to Professor Hallberg who shall in every particular measure up to the requirements, and there seems to be a sentiment that the new venture ought not to be launched until after the annual meeting in Boston next August. This recommendation has been made by a committee of the Washington city branch, and it has been canvassed also by the Philadelphia branch. It is understood that there are several candidates for the position, and the conservative heads want to put off action until the association at large can express itself, or at least until there can be a meeting of the full Council at the Boston meeting. Incidentally,

we are glad to see from all this that the occupation of pharmaceutical editorship is highly appreciated. Thanks, gentlemen!

* * *

AS TO "SHORTER" HOURS.

One of the subjects which will always be talked about in the drug business is that of shorter hours. Every once in a while the clerks initiate a campaign of reform, and of course there is always very much to be said for their side of the case. We have expressed ourselves on the subject with considerable frequency, but on this occasion what we desire to do is simply to reprint a schedule of working hours which a druggist in Louisville has been using for several years for the guidance of his clerk. It was contributed to a recent issue of the *American Druggist* and is as follows:

"LOUISVILLE'S" SCHEDULE OF WORKING HOURS.

Day of month.	No. hours clerk on.	No. hours clerk off.	No. hours clerk at meals.	What part of day off.
1	10	4	1	6 P.M. to morning.
2	13		2	2 meal hours.
3	5	10		12 A.M. to next morning.
4	13		2	2 meal hours.
5	10	4	1	6 P.M. to next morning.
6	9	6		12 A.M. to 6 P.M.
7	13		2	2 meal hours.
8	10	4	1	6 P.M. to next morning.
9	13		2	2 meal hours.
10	10	5		7 A.M. to 12 M.
11	9	6		12 A.M. to 6 P.M.
12	10	4	1	6 P.M. to next morning.
13	13		2	2 meal hours.
14	9	6		12 A.M. to 6 P.M.
15	10	4	1	6 P.M. to next morning.
16	13		2	2 meal hours.
17	5	10		12 A.M. to next morning.
18	13		2	2 meal hours.
19	10	4	1	6 P.M. to next morning.
20	9	6		12 A.M. to 6 P.M.
21	13		2	2 meal hours.
22	10	4	1	6 P.M. to next morning.
23	13		2	2 meal hours.
24	10	5		7 A.M. to 12 M.
25	9	6		12 A.M. to 6 P.M.
26	10	4	1	6 P.M. to next morning.
27	13		2	2 meal hours.
28	9	6		12 A.M. to 6 P.M.
29	10	4	1	6 P.M. to next morning.
30	13		2	2 meal hours.
31	5	10		12 A.M. to next morning.
31 days.	322	112	31	
	No. hours clerk on duty during month.	No. hours off during month.	Extra meal hours additional hours off.	No sleeping at store. No night calls.

This plan shows clerk averages about $10\frac{1}{4}$ hours per day, subtracting meal hours, making an average of $9\frac{1}{4}$ hours a day. Almost union schedule for hours.

[It should be understood that the store is open from 7 A.M. to 10 P.M., or fifteen hours every day, making the total number of hours of work for a month of thirty-one days, 465.]

* * *

HERR BODEMANN AFTER \$25,000.

Always a fighter, Herr Wilhelm Bodemann has now taken up cudgels against one of the life insurance companies. It seems that four policies were taken out with the company in 1899 and 1900, with the understanding that at a specified time he

could change the policies for any other kind written by the company. On the contrary, however, his application was denied when he notified the officials that he desired to surrender his straight life policy for a 20-year non-participating policy. Thereupon he put himself in the hands of a lawyer and brought suit against the company for \$25,000 for violation of contract. He thus seeks to recover all premiums paid to the company on three policies, together with the legal interest during the life of the policies. The proceeding is based on a decision rendered in a similar case and handed down by the Supreme Court some years ago. All of which suggests that it might pay others to look into their life insurance contracts and avoid similar trouble in the future.

* * *

THE PHARMACEUTICAL CHEMISTS.

The new Division of Pharmaceutical Chemistry of the American Chemical Society held an interesting meeting at the recent convention of the A. C. S. in Minneapolis. Prof. A. B. Stevens devoted his address as chairman for the most part to the subject of pharmacopœial standardization, and his remarks were important in view of the fact that he is chairman also of the U. S. P. Sub-Committee on Proximate Assays. Papers were read by Professor Stevens, E. R. Miller, G. H. Marsh, L. E. Sayre, F. Klein, and Edward Kremers. B. L. Murray, of Merck & Co., was elected chairman of the Division for the coming year, and A. B. Stevens and L. F. Kebler were chosen members of the Executive Committee.

* * *

U. S. P. REVISION. The work of pharmacopœial revision is apparently proceeding with a commendable rate of speed.

The Committee on "Scope" has, it would seem, not yet agreed on all substances to be "recognized," and from the first it has been understood that this would be one of the most difficult things to settle in the whole work of revision. Agreement has been reached, however, upon a number of the articles, and these are now being parceled out to the sub-committees for practical work. One or two meetings have been held in Philadelphia, and in the meantime Chairman Remington announces that Prof. W. F. Clark, of Chicago, has been elected by the General Committee to succeed Professor Hallberg as chairman of the Sub-Committee on Miscellaneous Galenicals.

THE DRUG-STORE "CHAINS."

The two big drug-store chains in the East seem to be gradually developing their holdings. The Riker-Hegeman Drug Co. will soon open a store in New Haven, Conn., and it is rumored that this concern is getting options on fifteen or twenty stores in Philadelphia. The Louis K. Liggett Co., of Boston, has, in the meantime, leased another corner store in its home city, and has organized a subordinate corporation to be known as the Hall & Lyon Co., of Boston, with a capitalization of \$150,000. The latter company is to be independent of the Hall & Lyon Co., of Providence, R. I. Out in Denver we find that the Scholtz Drug Co. has recently purchased Quinn's pharmacy and now has a chain of six establishments. Reverting to the Liggett concern, it may be reported in this connection that the United Drug Co., of which Mr. Liggett is the president, has been sued by the manufacturers of "Rex" on the ground that the trade-mark "Rex-all" is an infringement.

* * *

HONORING HALLBERG'S MEMORY.

The American Pharmaceutical Association has decided upon a unique but most practical method of paying tribute to the memory of the late C. S. N. Hallberg. It will make a systematic effort to collect sufficient money to liquidate the indebtedness of \$3500 on the Professor's home. To this end a large number of local committees have been appointed throughout the country, and subscription blanks have been furnished them. Everything will soon be ready for a vigorous campaign. All the money collected is to be turned over to the treasurer of the A. Ph. A., Dr. H. M. Whelpley, 2342 Albion Place, St. Louis, Mo. In the meantime Dr. Whelpley would be glad to receive direct contributions from any one who desires in this very helpful manner to recognize the many services rendered to American pharmacy by one of its most stalwart champions.

* * *

A SUGGESTION TO THE RICH DRUGGIST.

The *American Druggist* has an interesting editorial in a recent issue on a subject which has been touched upon several times in this journal—the endowing of schools and colleges of pharmacy. It seems that the late A. H. Hollister, the well-known pharmacist in Madison, Wis., bequeathed \$10,000 to establish a fellowship in pharmacy in the Univer-

sity of Wisconsin. Our contemporary asks the question which we have often propounded ourselves: Why do not other men of means in the drug trade leave some of their money to our struggling colleges? They need it sadly. No school or college of pharmacy can do the highest and best work on a self-supporting basis. Some of the institutions have endowments, but the only one which is really fortunate in this particular is the Massachusetts College in Boston. We hope that the well-to-do men in drug circles will bear this little suggestion in mind. They might die some day.

* * *

PRICE PROTECTION BEFORE THE SUPREME COURT. There is pending before the Supreme Court of the United States a case upon which depends much of the future of price protection in the drug trade. It is one brought by the Dr. Miles Medical Co. against John D. Park & Sons, the well-known house of jobbing cutters. Park never signed the Miles contract, but, after securing the goods by indirection, sold them at cut prices. The contention of Miles is that the contract "follows the goods." The case was argued ably on both sides last month, no less an attorney than Judge Alton B. Parker being one of the attorneys for Park. A decision may be expected before many weeks.

* * *

THE P. A. R. D. AND THE N. A. R. D. It begins to look as if the Philadelphia Association of Retail Druggists might after all be drawn back into the N. A. R. D. fold. Friends of both organizations have lately been endeavoring to bring them together, and at a recent meeting of the P. A. R. D. it seemed clear that the organization would reaffiliate with the national body at the completion of a pending "investigation." Even Charles Rehfuß, one of the original insurgents, was apparently in favor of this step.

* * *

The Chicago Retail Druggists' Association, in many respects one of the best organized local bodies in the country, held its annual meeting recently and elected B. A. C. Hoelzer president. Everything seems to be serene in Chicago except that cutting has broken out in some of the outlying districts. The association is grappling with the situation in real earnest and hopes to straighten it out soon.

The New York State Board of Pharmacy, in framing regulations for the enforcement of the new pharmacy act, has ruled among other things that every pharmacy and drug store in the State must own the latest editions of both the Pharmacopœia and the National Formulary, and that no registration certificate shall be issued until this rule has been complied with. Good!

* * *

The Missouri Board of Pharmacy is, with the help of the police department, inspecting the drug stores of St. Louis in the enforcement of the anti-narcotic law, and already has revoked the certificate of one clerk convicted of violating the statute. The board is also warning the trade that it must conform to that provision of the law regarding the employment of registered assistants.

* * *

O. R. Norris, a druggist in South Whitley, Indiana, whose articles on business subjects in the BULLETIN have been greatly appreciated, died last month very prematurely. Mr. Norris could not have been much over 30 years old. His contributions were always marked by originality and great practical usefulness, and their absence in the future will be sincerely regretted.

* * *

There must be something strikingly healthy about the drug business in St. Louis. Frederick Uhlich, proprietor of the Hyde Park drug store, recently celebrated his ninety-fifth birthday, and as for Dr. Enno Sander—well, we have long since given up the task of trying to remember how old he is.

* * *

Professor Remington has recently been spending two or three weeks in Cuba. He was entertained like a royal prince by the pharmacists of Havana, and before his departure for home he was assured that a considerable delegation would be sent to the Boston meeting of the A. Ph. A. in August.

* * *

The pharmacists of Illinois, like those of California and one or two other States, have decided to seek the enactment of a graduation prerequisite law, although in Illinois this step has for several years involved a considerable difference of opinion.

EDITORIAL.

AN INDICTMENT OF CITY BOYS.

"The boys entering the drug business to-day are not up to the old standard. By far the best boys we get are from the country pharmacy colleges. Nearly all my managers and my best men are from the country. Very few are from the large cities."

A rather sweeping indictment against the city-bred lads, don't you think? Coming from a more ordinary source, we might resent it. But a sentiment expressed by W. G. Marshall of Cleveland on the help question certainly carries weight. A proprietor who has been in the drug business for 25 years and now owns 14 stores ought to know a thing or two about the character of employees.

The city-bred man may claim that after all Cleveland is only one point on the map and that a condition observed there is not necessarily universal. He may argue, too, that in any event the question of fitness is largely a personal equation depending on the individual regardless of where or what he comes from. He may even turn to statistics which tend to show that the leaders in the commercial and professional walks of life to-day come more often from the cities than the country. He may point to J. P. Morgan in finance, to Theodore Roosevelt in statesmanship, to Hamilton W. Mabie in literature, to Joseph Choate in law, to Dr. Osler in medicine, and remind us: "Every one of them grew up in the city."

But that is beside the point. These men are not druggists. We are talking about pharmacists—not the leaders, but the great rank and file. There is no escaping the fact that such an observation expressed by a retail druggist of Mr. Marshall's experience is a sharp rebuke to the fellow from the city. It calls a halt to the metropolitan lads and says plainly: "Young man, you must change your ways if you want to be in the running with your country brothers." Cigarettes, late hours, and even more the things they signify, sap a young man's strength, deprive him of the physical stamina and the moral fiber needed to make a success of pharmacy. The retail drug business is no place for rounders.

Environment is of course an important part of any man's education. Perhaps there is something in the early training of a farmer's son that makes

him a better apprentice in a drug store. In his youth he learns a host of chores, brings in the wood from out-of-doors, carries water from the well, and milks the cows. Or perhaps he helps in the country store. Thus he receives a schooling in small tasks and grows up with some sense of responsibility.

The city boy, on the other hand, is fortunate if he be assigned to sprinkle the lawn in the summer or clean the walks in the winter. About his only charge is to be sure to turn the light out before retiring, and his good mania is usually on hand to tell him that. He is too much sheltered and doesn't learn to do things as the country lads must. Fortunately manual training is becoming more general in the public schools, and this may do much to offset the disadvantages of an urban civilization.

Our city lads are learning to work with their hands as well as their heads. Without manual training a boy's interests are likely to be personal. Mere things do not appeal to him. He demands activities that bring him in contact with people, wants to be a boss, a manager or an executive of some kind without first doing the menial duties by which such positions are won. The country lad, on the other hand, is all his life associated with things. There are not the social activities in the country to distract him. His companions are more inanimate objects, his interests impersonal, his craving for fun not so developed as to preclude concentrated thought upon the manual tasks that fall to the boy in a drug store. The consequence is he takes more naturally to drug-store duties. As for the confinement, he does not seem to chafe under it. If anything the city lad has even a keener relish for the out-of-doors. Certainly he is just as quick to find indoor work irksome. If environment stands for anything, the country lad has the advantage.

Something must be done to rid the city of the vast amount of human rubbish that accumulates there. The last census shows that there are over 50 cities in the United States with a population of 100,000 or over. More than a third of our 94,000,000 of inhabitants live in towns of 25,000 or over. In these centers of population men and women find life fuller, but whether it is more wholesome is doubtful. Fortunately there are some signs of encouragement. If our population is urbanized, it is also becoming suburbanized. Cities are increasing in area as well as population, and this tends to keep up the general level of health and hygiene.

Add to a better environment, a greater degree of

poverty, and you have another explanation for the country boy's efficiency. The city lad is more apt to have financial backing or other resources which he can fall back on should he fail in pharmacy. But with the country boy it is a case of "Make good or back to the farm"—and he knows it. This lack of means is a more important factor than we may suppose in the success of druggists and other business men.

Perhaps the reason why "boys to-day are not up to the old standard" is due to the increase of wealth in the land. The impetus to work is wanting. Carnegie thanked God for his early poverty, and to the young man about to enter pharmacy, an abstemious youth is undoubtedly an asset. Of course we are broad enough to lay down no general rules on the help question. We know that there are exceptions. We realize that as the poor are sometimes lazy and stupid, the rich are often gluttons for work, but the comparison is apt to be the other way. If the writer were running a drug store, he would be slow to hire any young man who did not owe his daily bread entirely to his daily labor. As a rule, the conscientious, feverish workers who give their best to every task, who are determined to succeed, who have learned from hard drudgery the value of money and the folly of squandering it, who hunger for work as the soldier craves the danger which is to distinguish him—they are not usually the sons of the well-to-do, the lads born with silver spoons in their mouths.

If the boys of to-day are not up to the old standard, their parents' means may be to blame. Their very money is apt to impose a handicap on the youngsters. The fond father who has wearily ascended the steep hill of poverty would indemnify himself in his children. Where he has hungered and thirsted and toiled, they shall take their ease. In the joys and delights of life, in its sunshine, its music, its gaiety, its leisure, in all the things at which he could only cast covetous glances they shall revel. The inevitable follows. Instead of bringing up his children to shun delights and live laborious days, to cultivate an austere simplicity and sincerity of life, to gird up their loins for the conflict that no human being can escape, to realize that in youth the happiness of achievement is infinitely richer and nobler than the happiness of enjoyment, he coddles and pampers them. Pleasure becomes not the spice but the diet of their lives. The labor which taxes yet develops their strength, they do

grudgingly. The self-denial which looks to a remote future for reward and joyfully exchanges the pewter of to-day for the gold of twenty years hence, is disliked.

And then we wonder why failure is the common crown of such discipline! A fine chance the children of ease stand against the Spartan athletes of poverty, trained to the last ounce, with the lust of success burning in their veins!

JNO. H.

ANOTHER LITTLE CHAT.

Last month we gave ourselves the pleasure of a chat with our readers concerning the plans we were making for the BULLETIN during 1911. We have a few more things we should like to say, and we hope you will all draw up your chairs and sit down for a few minutes. We hope and believe you will be interested.

First, about the price list in the rear of the BULLETIN—the department known as "Current Prices" beginning on advertising page 53 in this issue. Do you ever consult this? Do you find it useful to you in your business? Would you like to have us keep it? We are devoting nearly seven pages of valuable space to this list; we have always taken a great deal of pains to have it complete and well arranged; the prices are corrected every month by a man in the jobbing trade who is in close touch with the markets; but, much as we have tried to make this feature of the BULLETIN as perfect as possible, we sometimes doubt whether our readers really find it useful. Tell us honestly and frankly what you think about it. Would you advise us to abandon it and give the space to something else?

Last month we announced a new prize department to be known as "Best Soda Formulas." We offered to pay \$10 for the best formula and \$5 each for the two next best. We have had a few responses to this announcement, but not as many as we ought to have—although we are writing this before the January BULLETIN has been out very long. Let us hear from everybody with a good soda formula—something new and original. If possible we should like to announce the winners next month and print the prize formulas at that time.

In speaking of some of the new features of the BULLETIN last month we made no mention of two departments recently established in the journal. The department of "Drug Store Sketches," begun three or four months ago, has had some very read-

able stories—stories quite out of the ordinary in pharmaceutical journalism. We hope they have helped to while away a few half-hours, and we shall keep them up at least for a while. This month, for the first time, we are reprinting a contribution from another paper, but for next month we have an exceedingly clever and amusing sketch written for us by a young woman whose work began the department in November—Cleo C. Long.

As for the new department of "General Essays," printed on the last regular text page of the BULLETIN, we didn't expect to say anything about it. We are frank enough to confess that these short papers are written not so much to enlighten the pharmaceutical world as to enable the editor to get certain thoughts and notions out of his system. But somewhat to our surprise, and considerably to our pleasure, these short essays have brought us a gratifying number of very appreciative letters. Thanks, friends, thanks!

"DOPE" SELLING DRAMATIZED.

The playlet called "Dope" is now making a tour of the vaudeville houses of the country. Last month it was exhibited on the stage of one of the low-priced houses in Detroit, and we put our pride behind us and went down to see it. This "drama in one act" was written by the wealthy Chicago socialist, Joseph Medill Patterson, and it has all the earmarks of socialistic origin.

Throughout the whole twenty or thirty minutes of the play, appeal is constantly made to the prejudice of the poor against the rich, and the old theme is again developed that while the poor criminal is always hunted down, the wealthy malefactor may do what he pleases and laugh at the law. The playlet tells the story of a wretched druggist in the slums who does an illegitimate business in narcotics, but the whole thing is a horrible travesty. The druggist himself represents a "type" which couldn't be found in three drug stores in the land, and the miserable victims who come into the store one by one after their dope are exaggerations which are melodramatic in the highest degree.

The presentation is depressing in effect and fundamentally untrue in fact. To a pharmacist cherishing the ideals of his profession it is discouraging to have a thing like this exhibited in all the leading cities, and to have the impression conveyed that

dope-selling is more or less general in the drug stores of the country. Such an impression, indeed, could scarcely fail to be made by the drama.

Only the week before another play was presented in Detroit called "Alias Jimmy Valentine." It was supposed to be a true picture of prison life, but, like "Dope," it was an absurd travesty and burlesque to any one who knew the real facts. The warden was a cheap politician; the prisoners were emaciated victims of severe discipline and poor diet; and the whole atmosphere was false in the last degree. It would seem from these two instances that a certain class of playwrights have little regard for truth, and prefer to make their appeal to ignorance and prejudice. That harm is done by the false in art quite as much as by the false in life apparently doesn't trouble the consciences of such writers.

STRANGE CARELESSNESS.

A few business men of St. Louis connected with the Credit Men's Association have recently been gathering some interesting information regarding the attitude of local merchants toward their fire insurance. They took the pains to visit thirty retailers in different lines, asking each whether his property and stock of goods were sufficiently covered and what methods had been adopted, if any, to prevent the burning up of his property. It was found that only one of the thirty had been careful enough to see whether his policies were drawn to fit his risk; this merchant had gone to the expense of turning them over to his attorney for an examination. In three cases it was found that the insured were generating illuminating gas without the consent of the insurance companies and were thus vitiating their policies. In every instance, however, it was discovered that the merchants visited were glad to listen and get information.*

This illustrates again what we pointed out editorially two or three months ago in the BULLETIN, that not only druggists, but retailers in every line, are careless about the important subject of fire insurance. They do not seem to take the matter seriously at all. How they can afford to subject themselves to such chances it is rather difficult to understand. Too often a druggist carries no insurance whatsoever and suddenly finds that a fire comes along inconveniently and burns up all his earthly possessions without any chance of getting them back.

THE HALL OF FAME.

TWO MEMBERS OF THE WISCONSIN BOARD OF PHARMACY.

In the *BULLETIN* for April, 1909, we presented a group portrait of the members of the Wisconsin Board of Pharmacy. We are now showing like-



O. J. S. BOBERG.

nesses of two of these gentlemen in conventional style—Mr. O. J. S. Boberg and Mr. H. B. Allen.



H. B. ALLEN.

Mr. Allen hails from Richland Center and is president of the Board. Mr. Boberg is a successful pharmacist in Eau Claire. It is well known to stu-

dents of board conditions throughout the country that the Wisconsin Board is one of the most efficient in the United States.

LOUIS EMANUEL.

Mr. Emanuel is pretty well known throughout the country. He has for several years been one of the wheel horses of the N. A. R. D. and was for two or three years treasurer of the organization. In Pittsburg he is one of the bulwarks of the local association, and so far as the State of Pennsylvania is concerned he is now the president of the Board of Pharmacy. Mr. Emanuel at times wields a witty and caustic pen, and frequently he takes the floor to



LOUIS EMANUEL.

express his convictions in no uncertain manner. For the most part, however, he pursues the even tenor of his existence and usually presents a picture of studious and observing interest. Three or four months ago he was quite active as one of the hosts of the Pittsburg convention of the N. A. R. D.

TWO DRUGGISTS IN POLITICS.

We have had a good deal to say in the *BULLETIN* during the last few months about druggists who were candidates for public office. We are now showing a portrait of Frederick W. Mansfield, of Boston, who was made the Democratic provisional nominee for governor in Massachusetts last fall. It will be recalled that a deadlock at the State convention prevented the nomination of any candidate, and that Mr. Mansfield was unanimously

chosen to head the ticket unless and until agreement could later be reached on some one of the two or three candidates whose supporters were vigorously insisting on their nomination. Mr. Foss was later nominated and elected, Mr. Mansfield withdrawing in the meantime.

Mr. Mansfield is at present a practicing lawyer in



FREDERICK W. MANSFIELD,
Provisional candidate last fall for governor in Massachusetts.

Boston. He began life, however, as a drug clerk and was registered by the Massachusetts Board of Pharmacy in 1898. It has been stated also that he was graduated from the Massachusetts College of Pharmacy, but we are not prepared at this writing to confirm the statement. At any rate, he confined his attentions to pharmacy until, becoming quite an

orator, and gaining political popularity and influence, he decided upon the law as being under the circumstances a more congenial occupation. He stands very well with his party and is looked upon as a man of strength and promise.

Edward P. Dehner, whose portrait we are also



EDWARD P. DEHNER OF CLEVELAND.

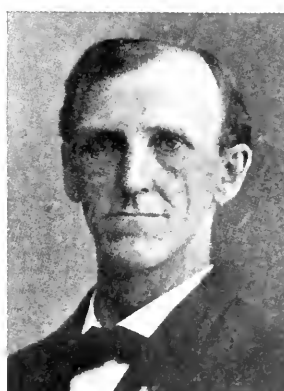
showing this month, is another Democratic druggist in politics. Mr. Dehner is in business in Cleveland and he was candidate for County Commissioner on the Democratic ticket at the last election. His two stores are at 3403 Detroit Avenue, N. W., and W. 65th Street and Fir Avenue, and he enjoys a very profitable and successful business.



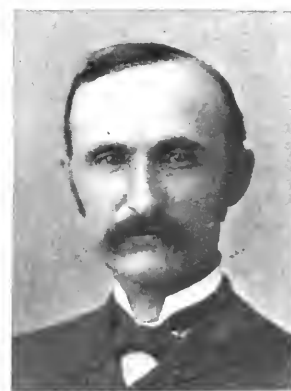
John Krause, Cleveland, Ohio,
Democratic member of the State
senate.



W. F. Blackstone, Georgetown,
Delaware, another State sen-
ator.

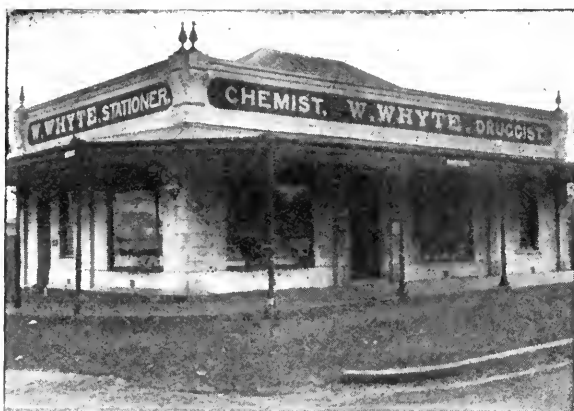


W. W. Albers, Wausau, Wis-
consin, still a third senator—Dem-
ocratic.



Albert W. Miller, Hartland,
Maine, representative in the State
legislature.

Four more druggist-politicians.



Starting in South Africa, we are showing here the building occupied by the pharmacy of W. Whyte in Roodepoort in the Transvaal. The structure is unique.



Here we have the interior of the Whyte pharmacy in South Africa. In the department of "Business Hints" in this issue we are showing another very interesting photograph sent in by Mr. Whyte.



Skipping over to Australia now, we present the interior of a pharmacy in Tasmania—that of Hatton & Laws in the city of Launceston. The fixtures are made of Tasmanian blackwood.



The photograph of this store in the Philippines is unfortunately not very distinct. The store is located in the town of Angelus in the Province of Luzon.



Getting back to American soil, we show here the store of the Harrington Drug Co. at 6th Avenue and Summit Street in Columbus, Ohio—quite a contrast to the others.



Still in Ohio, we illustrate in this cut the establishment of E. C. Kerker of Zanesville, of which the proprietor is presumably the gentleman standing at the left.

Drug Stores in Various Countries.



J. V. Ritschel is the proprietor of this establishment located at 761 Snelling Avenue in St. Paul, Minn. It bears evidence of prosperous custom.



This store, located in Willows, Cal., is called the "Postoffice Pharmacy," and the proprietor thus seeks to make capital of the fact that he conducts a sub-station for the government.



Mr. Cron, proprietor of this store in Somerville, N. J., had a live monkey in the left window and a placard reading "Don't monkey with that kof—take Cron's White Pine!"



The Palmetto Drug Co. in Mullins, S. C., has a prosperous establishment. W. L. Adden, Ph.G., the energetic manager of the store, is the first figure at the left.



Sorrell's Drug Co. has one of the finest stores in Hot Springs, Ark., and incidentally a large soda business is enjoyed, as may well be imagined from the picture.



This handsome establishment was equipped by the Wilmarth Show Case Company of Grand Rapids, Michigan, and its appearance ought to make it prosperous.

FOURTEEN STORES UNDER ONE HEAD.

The Remarkable Success of W. G. Marshall of Cleveland—Sales Aggregate a Million Dollars a Year—Plans Made for a Fourteen-story Building at the Entrance to the New Subway—A Branch Store to Occupy Three Floors, and the Rest Intended for Doctors' Offices—The Man Himself and His Beautiful Summer Home.

By JOHN HELFMAN.

Twenty-five years ago W. G. Marshall went to Cleveland and started in business for himself. To-day he owns 14 stores in that city which do an aggregate business of a million dollars a year and the sales are still growing!

Mr. Marshall has built up a remarkable organization. Each store manager is a graduate, so to speak, of the main establishment, where he has worked under the personal tutelage of Mr. Marshall himself and his able assistant Frank Hawkins. In that way each manager acquires a knowledge of the firm's methods. Mr. Marshall himself received his early training in the drug store of L. H. Yeomans, one of the foremost pharmacists of Canada.

A 14-STORY DRUG AND MEDICAL BUILDING.

Far from satisfying his ambition, success has only served to spur Mr. Marshall on to further efforts. At present he is contracting for the construction of a 14-story drug and medical building



The fourteen-story drug and medical building soon to be erected by Mr. Marshall at the northwest corner of the West Side Market House Square, opposite an entrance and exit of the new Cleveland subway.

that will probably be the largest of the kind in the United States. The site will be the property now occupied by the main store at the corner of Superior and Square Streets. The building now standing will be torn down, and the stock transferred temporarily to the two buildings immediately adjoining, which Mr. Marshall has purchased for the express purpose of taking care of the business while the new structure is under way. As Mr. Marshall himself explained: "I didn't care to close up shop here for a whole year. Now I have only to move next door."

Some may consider this whole undertaking rather venturesome. Perhaps it is, but Mr. Marshall is too shrewd a man to take a step like this without good reason. It happens that the new subway already approved by the voters of Cleveland will have a down-town entrance and exit on the square contiguous to Mr. Marshall's property. That alone gives the place immense possibilities. Thousands of people will land there daily, not only from the city but from the towns about, which will make the corner extremely valuable. Mr. Marshall feels he has a wonderful proposition there. The subway should increase the value of the property by \$100,000. Having obtained a 99 years' lease of the site, Mr. Marshall proposes to make the most of it.

Later he will put up another tall structure on his own property immediately adjoining the proposed 14-story building.

REAL ESTATE DEALS.

Thus Mr. Marshall's real estate dealings are becoming extensive. It has all along been his aim to own his store sites. So he has been gradually acquiring one building after another as his chain of pharmacies has developed. Recently he bought the property of the drug store now located at the corner opposite the West Side Market House with a view to occupying it when the lease of the present tenant expires—another example of his acumen in real estate deals. Directly across the street is being built the new Market House costing \$150,000.

That is bound to make the Marshall branch a valuable corner. Mr. Marshall has big hopes for his Market House Drug Store. He believes it will be second only to his West Side Pharmacy, now the biggest profit-maker in the Marshall chain.

Certainly Mr. Marshall is an opportunist with a marked acquisitive instinct, a type of man not uncommon in Cleveland. One can hardly visit that



The Marshall store at the Euclid Avenue entrance to the Taylor Arcade—one of the chain of fourteen establishments.

city of wealth without coming away with the feeling so well expressed in Thackeray's "The Child of Godsgate." "Depend upon it, there is something we do not wot in that mysterious overcoming of circumstances by great individuals; that apt and wondrous conjuncture of the hour and the man."

So far as we know Mr. Marshall's activities have always been confined to the drug business. He was one of the original stockholders in the Rexall Company and now owns considerable stock in that organization. He has a keen eye for promising locations. Not long ago he took over a grocery store which occupied two rooms at the corner of Superior and East 105th Streets. The place now stands transformed into a beautiful drug store. In a city like Cleveland where rents are high such ventures call for no little knowledge of real estate values.

Reverting to the fourteen-story structure, Mr. Marshall feels that there is need of an office building for medical men in this section of Cleveland. There is not a doctor at that end of the city. People on the west side have to pass the square and go a mile further up the other end of the town before reaching a physician's office. It is Mr. Marshall's intention therefore to devote the first three stories of the new building to his pharmacy and arrange the rest for

doctors and dentists. Compressed air, hot, cold and ice waters, electricity, and all the appliances of a physician's office will be installed.

The building will be made of white tile brick costing \$85 a thousand. Reproached for such seeming extravagance, Mr. Marshall replied: "We can rent this space for \$1.50 a square foot and nothing is too good." With the building of the subway, and people landing from all parts of Cleveland in the immediate proximity of Marshall's new store, the location will be one of the best in the country.

GATHERED MANY IDEAS ABROAD.

Many of the ideas for the new building Mr. Marshall gathered while abroad. A schooled and veteran traveler, every time he came to a new town he made it a point to visit the pharmacies. In this way he gathered a host of ideas that will be observed in constructing the new store. "Even in the small towns," said Mr. Marshall, "I sometimes receive some useful suggestion."

Several proposed features of the new building are doubtless patterned after the foreign pharmacies. A few have a distinctly Parisian flavor. There will be a manicurist in the place, and she will be located on the mezzanine balcony which runs completely



The Marshall branch at East 105th and Superior Streets—the latest one established.

around the salesroom on the first floor. Near by will be the ladies' toilet articles and perfume departments where women will be waited upon by salesladies. The telephone booths will also be located on the mezzanine floor. You see the purpose of this arrangement: On ascending the marble stairs leading to the mezzanine balcony where all these auxiliary departments are situated, one can't help



The house itself.



The Marshall family.



A beautiful view on the estate.



Iris grows liberally along the lake shore.



Mr. Marshall's son, George G., canoeing on the lake.



Another pretty view.

Views of "Rock Run Farm," Mr. Marshall's country estate some miles out of Cleveland.

getting a view of the entire establishment. Looking down on the show-cases below the customer will see here a display of candy, there an assortment of rubber goods, and yonder something else that will at once suggest a purchase. Mr. Marshall has recognized a principle in modern merchandizing that the more visible the goods, the better they sell.

There will be six big show windows on Superior Street, the cigar department being located between the middle two. There will be four entrances, two facing the square and two on Superior Street. The ground floor will be 21 feet six inches high. The top floor of the building will be devoted to vaults where the occupants may rent space for storing papers and valuables.

THE MARSHALL SYSTEM.

One may ask: "How does Mr. Marshall keep track of all his stores?" It is notorious that this Pharmaceutical Baron spends only a few hours a day in his office, where he stays just long enough to read his mail and settle the problems that come up in the business. He is never "fussed." Stout and jovial, with a smile that won't come off, he appears to be anything but a man of cares. If the foreman on his farm wants a half-hour's time to complain about one of the hands for having been too hilarious the night before, he may have it. Mr. Marshall may even open a *Cleveland Plain Dealer* to the quotations on farm produce and give the foreman a few pointers on the price of timothy or clover. The responsibilities of the work might weigh heavily on some men, but Mr. Marshall is always himself, serene and unruffled. Just outside of his office some one pinned a sign on the wall: "Ridicule is only a shower. Hoist your umbrella and let it rain."

To leave the man for a moment and return to his system: Marshall's complacency, his leisure, his opportunities for travel are explained in a single word—organization. By the system now in vogue among the Marshall pharmacies, the chief knows just what business each store is doing. On Mondays his store managers convene in the office of Mr. Hawkins to get posted on prices and other things. Here they discuss everything of importance in the work. If a man has had any altercations with a customer, Mr. Marshall hears the facts and the trouble is ironed out. But above these verbal reports coming from the managers are the business records kept in every store and submitted to Mr. Marshall at regular intervals. At present each store is showing a gratifying gain over the year

before. No doubt this is largely due to Mr. Marshall's liberal attitude toward his store managers. They get plenty of time off, good salaries, and a percentage of the earnings. With this profit-sharing scheme in vogue throughout the chain, every lieutenant in the firm is encouraged to give the business his best efforts. The buying for all the stores is done by Mr. Frank Hawkins, who has been with Mr. Marshall for 19 years.

Asked about the help question, Mr. Marshall replied: "The boys entering the business to-day are not up to the old standard. By far the best boys we get are from the country pharmacy colleges. Nearly all my managers and my best men came from the country. Very few are from the cities."

In the main pharmacy, where the branch managers receive their initial training, each clerk has special duties to perform. Every man has charge of a separate section of stock. Every day he makes a list of the goods needed in his department, checks up the shortages, and replenishes his shelves from the stock-room.

Once a year Mr. Marshall has an anniversary sale in which souvenirs are given away. A special sale is held monthly, announcements being made in the chief local newspapers. Full-page ads. are used. All this costs money, but it brings large returns, especially in the form of big mail orders.

BOOKKEEPING METHODS.

Mr. Marshall's stores are not confined to any one section of the city. They may be found on either side of the river. To keep his eye on such widespread interests would, we repeat, be a difficult task were it not for the admirable organization of the business. It is so systematized that the owner always knows the condition of each store. His bookkeeping system is probably one of the best in the country. At the end of every month he can tell the sales and profits of each store. Here, for instance, is a specimen page where invoice payments are recorded:

No.	Date.		Favor of	Am't of check.	Freight.	Disc't.	Other deductions.	Total am't of bill.	Remarks.
	Bill	Paid							
4201	3.22	4.10	B. W. & Co.	40.00	1.00	2.00	7.00 (Goods returned or broken.)	50.00	

In the specimen page here reproduced, the general convenience of the system is quite apparent. The gross amount of the bill is \$50. The freight was

Every year Mr. Marshall imports fresh bulbs from Holland. From six to a dozen are put in a pot and buried in the ground. During November or December they are taken out of the ground and put into a cold cellar. Those that are most advanced are then set below the window in the billiard-room where they remain until they are ready to bloom. "It is so easy!" remarks Mr. Marshall. "If more people knew how to raise bulbs, they would certainly enjoy it! It involves little expense and you have a beautiful display of flowers in your home the year round." The border of the lake is planted with Japanese, Siberian, Spanish and German iris, so that from early spring till late fall there are different kinds of iris blooming.

Aside from the cultivation on the farm, Mr. Marshall has taken pains to preserve 200 acres of original forest woodland. This stands unchanged. He allows no birds or animals to be shot on it.

THE MARSHALL FAMILY.

Sharing the pleasures of this place are Mrs. Marshall and the two boys. The older boy, George G. Marshall, is an athletic fellow now taking an A.B. course at Western Reserve. Later he will enter his father's business. Wentworth is the younger lad. Lovers of dogs will not permit us to omit mention of the blue-ribbon collie, a beautiful thoroughbred animal seen lying on the ground in one of the pictures.

Thus it will be seen that Mr. Marshall has found a way of escaping at frequent intervals from the cares of business. Besides spending much time at his country home, Mr. Marshall travels considerably. He not only works but has leisure to think, which may in a measure explain his success. He is not so buried in details as to have no time to plan bigger things. Yes, Marshall lives the full life—and the successful life!

THE BUYING AND SELLING OF SOAP.

A Refreshing and Interesting Article—Qualities that Count in Selecting a Brand—A Consideration of the Wrapper, Aroma, Profit, Advertising, and Other Points of Importance.

By GROVE B. BREWER.

Carefully wound in absorbent cotton and packed in the recess of a child's "treasure" box, there was found the other day a little baby—of *soap*. Seventeen years have passed since this "treasure" was packed away—a souvenir of the World's Columbian Exposition held in Chicago in 1893—and the "child" now grown to manhood pulls it forth, inhales the pleasing odor, smiles because he can't help it, and albeit loves it just as much as he did when he first deposited it in the box.

When we deal in soaps, then, brother pharmacists, we have got something of more interest to the individual than we imagine. Nine times out of ten the purchaser "loves" the soap he buys, especially if he adheres to one kind, just as did the man above.

And as one of the cleanest and most profitable side-lines that a druggist can handle, soap takes its place among the things it becomes an actual pleasure to buy and sell.

When an agent comes into my store to sell me soaps I take time to give him full consideration. First of all, his line is undoubtedly new—and I take

it for granted that this is the line we are to treat to-day, since to my mind every drug store ought to keep a supply of the standard, nationally advertised lines of soaps. By these I mean soaps that are advertised extensively in such magazines as the *Saturday Evening Post*, the *Ladies' Home Journal*, the *Delineator*, and the few greater publications that are really "national." First of all, then, let us say that this is a new line of soap and it is up to me to test it.

If cakes have been previously forwarded for trial use, I perhaps give it an immediate trial in water. It lathers freely or not; it tastes, yes, tastes of that peculiar almost almond flavor that denotes alkali, or it does not; it carries the scent of the flowers with it down to the last wafer—does it? Well, you can't tell then, but one infallible test is to cut the cake in two and then place the center of the cake to the nostrils. No amount of scent in the paper wrapper will help out here; the test is sure. And right here, let me say that outside of the advertised lines, it's the wrapper that sells the soap.

HOW THE WRAPPER SELLS THE SOAP.

If I were putting up a low-priced soap for toilet purposes, selling, say, at "3 for a quarter," I think I would lithograph my soap wrapper in every color of the rainbow, with lots of double dyed gold on top, and then—sell the soap. Of course I mean this from the consumer's point of view.

Your fair-haired lady who enters your store, nicely dressed, modest, steps up to the counter. Your clerk approaches, meanwhile studying his customer if he knows his business to determine what grade will please her and make the sale quickly. He has the whole range of possibility before him. The game to him gets interesting; but to the prospective purchaser it is solely one of buying seriously, profitably, pleasurably, quickly.

Now from just one man's experience as a druggist the consideration runs something like this: "We have an excellent scented soap here at 3 for 25 cents," begins the clerk, handing out the line that is being pushed because of its merits for quality that satisfies the customer. If your store is in the fashionable shopping district and your customer is "one of the four hundred of your city," she will say: "No, I neglected to mention I wanted Blank's Soap." The clerk: "We haven't Blank's soap, but here is an excellent soap of the same nature, recommended highly—"

But he never gets any further. Your fair lady elevates her head. "Oh, you haven't that kind. Very well, I will go elsewhere."

Some families have been known to cling to one kind of soap for years and years, perhaps something that their grandfathers and grandmothers used. If you want to please these people, your store being in their district, you must keep the goods they want.

SUITING YOUR STOCK TO THE NEIGHBORHOOD.

It has been my experience that the better class of trade almost invariably *know* what they want. They ask for it by name; buy quickly and go out. The medium class of trade, the three-for-a-quarter class, and sometimes the three-for-50-cent class, rarely know what they want. They are influenced largely by the attractiveness of the package, never buy the same kind twice, or, to be more exact, order it so many times that you know their favorite. And if your store is in the factory district, your sales at times will run to grit soaps; and in all places a small proportion of medicated soaps. If your store is in the market district or the poorer home district, what

will the good mother of six buy, who comes in to your store in "calico wrapper" attire, with two little tots clinging to her dress on opposite sides? What will she buy? Castile? Yes. Six big bars of Ivory? Yes. No fancy wrappers; no perfumed products will enter into her purchase lists, for she has to adhere to the strictest form of economy; and she does so, in spite of that present-day American spirit of extravagance which we are all more or less guilty of.

And then, too, I believe, from a somewhat superficial study, that women buy 50 per cent of the soaps sold; that more soaps are sold in the summer-time or under southern skies than in winter or in northern territories; that fancy packages sell best during the holidays; that in the better districts 50 per cent know and ask for certain kinds of soap, this fact being due to the wonderful system of educational and sales creating advertising of recent years by manufacturers of soaps. I believe further that in the product itself, the price, the quality and the elegance of the package are the determining factors that go to create a demand; and that the really high priced goods of the very best quality, advertised extensively, sell best to the floating population, travelers and theatrical people; while the highest priced lines, unadvertised as well as advertised, sell to the wealthy people and the younger members of society.

SHOULD THE DEALER ADVERTISE SOAPS?

No dealer who acquaints himself however slightly with the rules of successful retail advertising, can fail to see the immense advantage of linking his advertising with that of the manufacturer by announcing that he has the goods. The newspaper, if your store is down-town, is of course the most excellent medium for quick returns and the winning of public confidence. And yet while spending several thousands of dollars each year in advertising in the newspapers myself, I cannot help but feel that a big window display of attractive soaps makes the goods "move" surely as the sun sets. The window must be attractively arranged of course, and must be confined to a display of one kind of soap; the prices must be stated; the goods shown to the best advantage; the great spirit of "creating the desire" must be breathed into the exhibit there and on the counters containing the same goods within the store. Surely a store that increases its business each year ought to show a proportionate increase

in its soap department. If yours doesn't, study your locality, your trade, and then—advertise soap that appeals to "your people." The field is ever widening. Shaving soaps in sticks, in powder and in paste tempt buyers and tend to increase trade. More kinds are being nationally advertised as years go by—and advertising increases consumption. What is more, we druggists are beginning to see the good business sense of pushing a line that, as I figure it, pays on the average about 40 per cent gross profit.

HE BELIEVES IN SOAP.

And so, of the ten show-cases in my store I devote one to soaps. I favor window displays for

moving the goods. I believe in the attractive package. And I think that even if you do not agree with me that the buying of soap on the part of the consumer is three-quarters "love" for the product and one-quarter a matter of alkali and grease perfectly combined, that you will at least say that soap, as you know it, is a clean, profitable line to handle and is certainly not repellant as a product or as a buying or selling proposition to any one, except to the little boy who said:

"Say, fellers, I haven't washed my hands or face with SOAP for two months. Why should I? Didn't I go in swimmin' in the creek EVERY DAY this summer?"

WHAT IS SALESMANSHIP?

An Attempt to Define It—The Fallacy of Some of the Current Opinions on the Subject.

By H. F. GOODRICH,
Anoka, Minnesota.

For some months the various trade journals have been full of articles on salesmanship. Many of these preachments have been of real value to the clerk or traveling salesman and have been based upon real horse sense. Others have been of such nature that if taken without liberal doses of salt would give a man a perverted idea of salesmanship.

"The true definition of salesmanship," writes a contributor to a recent magazine,* "is the art or science of selling goods. . . . Any one can sell that which a customer wants, but it is the creating of the demand or the awakening of the interest that requires salesmanship. . . . If I wish to purchase a hat I go into a hat store. The salesman shows me a hat, tells me it is the latest style, and states the price. I pay for it and walk out. That is not salesmanship.

"If the salesman, after selling me what I have asked for, proceeds to show me other goods (canes, umbrellas, gloves, or other articles) and I buy, he has awakened in me a dominant interest, and effected a sale of goods which I had no intention of purchasing. This is salesmanship."

In other words, this writer contends that if the

man who made the sale gave his entire attention to supplying the expressed wants of his customer, he displayed no real salesmanship whatever. That appears to be the conclusion of the writer quoted.

THE OTHER SIDE OF THE QUESTION.

I believe that this is only a half truth. If the haberdasher's clerk is a real salesman, he knows not only the latest style, but his own stock. He has also studied his trade well enough to realize that a tall, thin man requires a hat of different shape from that of a more corpulent customer. He can then sell his patron a hat that yields his house a handsome profit, but at the same time pleases the customer. If he can sell him an umbrella and a pair of gloves too, so much the better, provided the customer really wants them. But, and here is the point, the intelligent help that the clerk gives his patron is the real test of his salesmanship.

Or, to take an example from our own trade, suppose that a customer comes into the store and inquires whether a well-known patent article is a good thing for a cough. Further questioning reveals the fact that the remedy is not for his own use but is to be given to the baby. The druggist, if he knows his business, will tell his customer that the

*"The Art of Salesmanship," by O. L. Ward, in the *Omaha Druggist*.

article called for, while a reliable remedy (if it is), contains too much opiate for a youngster. Then he sells him a harmless preparation for children's use. So whether the dealer has increased his net profit from the transaction or not, he has given real service to his customer. He is a salesman.

The salesman, then, must have not only a desire to boost for the house, to make sales. He must have a general knowledge that will make him a real help in serving the public.

KNOWING WHEN TO STOP.

One more thing the salesman must have. Strictly speaking it would be included under the term "tact," but the latter word is often used in a different sense. He must know when to keep still. If a haberdasher, he must know that when he has sold his

customer the hat he called for, an endeavor to sell his patron some additional things, say, gloves or an umbrella, arouses the man's resentment. If a druggist he must realize that when a customer asks for cough medicine there is danger in trying to convince the buyer that a plaster and a box of the druggist's own make cold cure are equally necessary. As likely as not the customer may be one of the magazine-instructed "No-thank-you-I-want-what-I-asked-for-Good-day" type who will leave the store in a huff, and there is lost not only a sale but a patron as well. Often the real salesman will have to show his salesmanship by simply keeping his mouth shut, and selling, pedler fashion, articles which yield little profit, realizing that some time he may be able to direct his customer's want to the distinct advantage of both.

"MY MOST EXCITING EXPERIENCE."

Tincture of Nux Vomica Dispensed for Water—Handling the Crowds that Flock into the Store in Accident Cases—A Doctor's Acumen and a Speedy Bicycle Prevent a Catastrophe.

REGAINING A POISONOUS PRESCRIPTION.

BY EDWARD H. GRIFFITHS, WINNIPEG, MANITOBA.

The town where I first saw the light of the drug business had a population of but a few hundred and was away in a country where the doctors were few and the druggist was the handy man for everybody. My employer, one of the old-school style, did a great deal of counter prescribing, and about this time had established quite an extensive business in that direction.

Among my own daily duties was that of dusting all the shelves and likewise the bottles on them, so that I soon learned the position of every bottle on the shelf. Later I came to know what each of them contained, so that if one was taken out of its place I easily knew where to put it back.

One day I was returning to work after lunch. Having now a mental picture of the store in my head, I quickly noticed on entering that the ten-ounce shelf bottle of tincture of nux vomica was nearly empty. I had filled it but a few hours before. Without even taking my hat off, I questioned my

employer about it, who was then standing behind the counter in a somewhat dreamy mood. Hardly had the words left my lips when he flew into a frenzy, quite unable to explain himself. After a moment's thinking he told me that he had filled a ten-ounce bottle of medicine for indigestion, for a young lady, and instead of adding eight ounces of water he had filled the bottle with tincture nux vomica and labeled two teaspoonfuls for a dose after meals.

As well as he could, he gave what particulars he recalled of her dress and the direction in which she went. I immediately rushed behind the counter, got a small quantity of potassium bromide and likewise the same of chloral, went out of the store and jumped on a wheel which was leaning against a lamp-post. After riding hard for about ten minutes in the given direction I overtook the woman passing through the garden gate. Grabbing the bottle from her hands, I explained that she had been given some one else's medicine, and promised to return the right one to her inside of half an hour.

When I arrived at the store with the dangerous

potion in my hand my boss heaved a sigh of relief, and his worried expression suddenly changed to a broad smile.

PUTTING AN END TO MOB RULE.

BY MAXWELL BUKOFZER, NORTH PATERSON, N. J.

It must be about fifteen years now that I have been working for Mr. K. in ——. My employer, a mild-mannered, kind-hearted German gentleman of some means, owned a beautiful, classy pharmacy at the corner of a busy avenue and a rather fashionable street. About half a block from the store the avenue shows a sudden, steep decline where, partly through the carelessness of the city officials, partly through the inattention of the car employees and the recklessness of the passengers, more or less serious trolley car accidents happened *bis sivo ter in die*. With unfailing regularity the unfortunate victims who got hurt were carried into our nice, clean store, which they mussed up with their blood and often their foul language. They were invariably followed by a mob of excited people, 90 per cent busybodies and 10 per cent loafers, who pushed in noisily, jostling each other, chock-full of silly advice, and who incidentally during the temporary anarchy stole right and left any article which came in contact with their playful fingers.

This embarrassing condition must have existed in its disagreeable monotony for many a year. But one day, while Mr. K. tended to a boy, a great big coon smashed a mirror plate in a hand-to-hand encounter with another loafer who had differed from him as to the mode of treatment of the boy's maimed toes. Mr. K. at last actually lost his temper completely, and after the habit of most of these gentle creatures who are hard to anger, got "criminally" mad. He cursed blood-curdlingly, swore that "that" settled "it," that "enough" was "plenty," and that "too much" likewise was "plenty," and exhibited a vocabulary of more such time-honored adjectives illustrative of a wrathful mind, including, I blush to say so, many repetitions of a word beginning with "d" which he had swallowed manfully for many years.

"From to-day on this blank thing stops! Hear? Never get anything but work, dirt, and expense out of these blank blank cases anyway! Hear? Rotten business all the way through! Hear? Next time some blank blank fool is carried in this blank store tell them to take him to the blank hospital! Hear? No blank bandaging, and no blank blank washing

in here! Hear? Understand? Blank, blank!" With an expression anything but blank on his face, usually so gentle, my worthy preceptor stalked away to vaporize his bitter indignation over his beloved chess-board.

The following day, Mr. K.'s day off, at about 2.30 P.M., the only too well-known rumpus outside heralded trouble. It had drizzled all day, when two husky laborers brought in an old matron, leaving two broad streaks of mud and one of blood on our clean floor, as a sort of introductory handshake. Two score of citizens followed closely and imparted their modicum of dirt, also sufficient noise to supply a foundry.

Out of the general jumble I heard the usual crisp demands to "fix the old lady up," and the usual heated argument on how it should be done. In spite of the tumultuous excitement I noticed a box of sulphur and cream of tartar lozenges disappear from its abode without a farewell address. With this the fighting spirit of my boss seemed to flow into my 19-year-old bosom, and following his order to the letter I cried in stentorian voice to them to get out. "Ain't you young buck goin' to fix up the poor old lady?" queried a heavyweight woman, whose breath and accent gave evidence of a tonic fluid racing through her veins. "No," I shouted; "my orders are to ring for the ambulance, but to do nothing myself. Moreover, all of you people will have to clear out of here at once."

Thereupon the noise increased to such an uproar that the blasted walls of Jericho must have wondered why they had ever obeyed so meek a call, and I was threatened with instant annihilation by means of misapplied brawn. Though trembling in my boots I, nevertheless, resisted and grabbed the only true friend of the pill-twirler in distress, the 28-per-cent ammonia bottle. At this critical moment two angels in the uniform of the police arrived, and spreading their wings soon cleared the atmosphere.

After the ambulance had taken away the poor old woman I found that the mob had taken away a pound bottle of expensive perfume among other minor booty. When at night my employer returned in his usual good humor, I was severely reprimanded for my lack of diplomacy in applying his command all too literally to an unfortunate representative of the weaker sex. This aroused a heated argument, which in turn led to my resignation.

This most exciting experience in my drug career

made me a wiser but still unconvinced servant of the hydra-headed monster, a crowd of free citizens.

POSSIBLY A HOLD-UP GAME.

By CHAS. F. WEYELS, BRADDOCK, PA.

A young woman came into the store and ordered fifteen cents' worth of lead-water. Upon my asking her what she wanted it for, she said her arms were poisoned and she wanted this to rub on them.

I sold it to her, but neglected to have her sign her name in the poison register, which afterwards caused me some little alarm. I discovered a little later that I had sold her solution of lead subacetate instead of the dilute solution.

I knew it would do no harm if used as the woman had indicated, so I didn't think any more about it until a well-dressed man came bounding into the store and said with a show of authority: "Are you the druggist here. Did you sell a woman lead-water a few minutes ago?"

I told him I had. He then informed me I had gotten myself into serious trouble. I naturally became a little worried. I asked what he meant, and he told me the woman had drunk the solution. He made a threat, saying that she was his wife and I'd pay the penalty. I was very much disturbed by this time, and told the man she was very foolish to have drunk it, which seemed to infuriate him all the more.

He said to me: "You won't feel so foolish when I bring an officer to escort you to jail."

He then departed as I thought to bring back my escort. One of our doctors happened in soon, and I related the incident to him and asked him what harm it would do. He said it would be assimilated very readily, thereby causing lead poisoning. I waited some time in suspense, but my accuser did not return; so I came to the conclusion he thought he might scare a little money out of me, but when I didn't seem so worried, he thought it was of no avail and dropped the subject. I have never seen the man or woman since.

AN APPRENTICE'S ERROR.

By SAM'L L. McDOWELL, CAMDEN, ALA.

Ever since I have been working in a drug store there is one custom that I have disliked. It is the habit of putting a poisonous drug by the side of a non-poisonous one of nearly the same name, like

calomel and corrosive sublimate, or paregoric and laudanum. Calomel goes by the name of hydrargyri chloridum mite, and corrosive sublimate, a very deadly poison, by the name of hydrargyri chloridum corrosivum. Paregoric is called tinctura opii camph., while laudanum is known as tinctura opii. These bottles are placed side by side. Since I have stated how our bottles stand, I may proceed to tell you of my mistake.

For nearly a week I had been staying up late at night either working or going to parties. One afternoon I was sitting about the store very sleepy when a pretty girl, Katie Jones, the girl that I had been courting at the parties, brought in a prescription from Dr. Bonner and asked me to fill it.

I took the prescription, which called for five grains of calomel and five of soda. Not thinking much about what I was doing, I went behind the counter, got a bottle which I thought was calomel, and measured out five grains with which I mixed five grains of soda. This I divided into powders and wrote the directions: "One powder to be taken at six, seven and eight to-night." I wrapped them up and handed the package to Katie.

After I gave the package to her she talked a little about the party, then left for home. In about an hour Dr. Bonner, my boss, came in and asked me whether I had fixed the prescription he sent me by Katie. I told him that I had. Then he walked behind the prescription counter, but came back in a hurry with a bottle in his hand.

"Have you been selling corrosive sublimate to anybody," he asked.

"No," I replied.

Then he asked, "What have you been doing with this bottle?" I looked at the bottle and realized that instead of calomel I had put in five grains of the deadly poison, corrosive sublimate, in the powders.

I didn't say a word to Dr. Bonner. I just glanced at the clock, seeing that it was five minutes to six, and jumped on my bicycle. Mrs. Jones, Katie's mother, lived about a mile out of town. I was determined to get to her house before six o'clock and prevent Katie from taking the medicine. I pedaled with all my might, but it seemed to me that my wheel would only creep along.

After what seemed to me at least half an hour I came in sight of Mrs. Jones's house. I did not take my eyes off it, but pedaled harder than ever. The first thing I knew I heard a crash, and my wheel dashed into a stump, throwing me over the

handle bars. I did not stop to see if my wheel was broken, but jumped up and ran on to the house as hard as I could. I rushed up the steps and nearly knocked the door down before anybody could open it. After a few seconds Mrs. Jones opened the door and started to say something, but before she could open her mouth I holloed: "Has Katie taken her medicine yet?"

She told me that Katie hadn't taken it, but was going to do so in a few minutes. Then I knew that I must cover up my mistake or I would lose my job and our store would lose a great deal of trade.

I checked myself and tried to act cool. I told her to tell Katie that Dr. Bonner had requested her not to take that medicine, that he had decided to change it and give her another kind.

Mrs. Jones asked me why I had been in such a

hurry. I told her that Dr. Bonner had bet me a pound of candy that I could not get there in time to keep Katie from taking the medicine. She laughed at this, and told me that I would have to give her and Katie half of the candy.

I asked her to give me the powders, and after I got them I started on back to the store. When I reached my bicycle I found that it was not injured the least bit. I got on it and rode on back to town.

After telling Dr. Bonner how I had stopped the medicine from being taken, and how I covered up my mistake, he did not get very mad but said that it would teach me a lesson in the future, and I can truthfully say that it did. As long as I live, I may make other mistakes in a drug store, but I will never mistake the poisonous corrosive sublimate for the common household drug, calomel.

DON'T BE A WASTEFUL DRUG CLERK.

**The Need of Economy in the Drug Store, with a Few Illustrations of Wasteful Practices—Written by
an Officer of a Clerks' Organization.**

**By CHAS. H. BOWERSOX,
Columbus, Ohio.***

The clerk who practices economy in the store in which he is employed possesses a quality that is highly appreciated by his employer. Furthermore, the clerk who shows an inclination to be saving usually receives better compensation for his services.

Some men give little or no thought to their employer's welfare; and the matter of checking or avoiding loss or waste seemingly never enters their minds; or if it does, it is not sufficiently manifest, for they fail to grasp the opportunity to remove a possible doubt.

I call to mind a clerk who was wasteful to an extent that caused the other clerks in the store to wonder why the proprietor did not dismiss him. Apparently he never realized that it required money to conduct a business; for he had a habit of throwing away or destroying much that would prove useful in the future. In wrapping goods he would sometimes tear off the paper reel a portion too

small for his purpose, when he would invariably destroy it.

One day he accidentally broke a jar containing potassium bromide. It did not occur to him that it could be used in making an elixir of that salt, for he gathered it up on the dustpan and threw it away.

On another occasion he unintentionally mixed some distilled water with a known portion of alcohol, whereupon he thoughtlessly consigned the mixture to the sink. One would think that the idea of using the diluted alcohol in making some of the various tinctures would have occurred to him.

I have cited just a few of the numerous instances of thoughtlessness and ill judgment displayed by this clerk. But these few are sufficient to illustrate a general class of wasteful practices. Prudence and disposition to save should occupy a high place in the mind of every clerk. He should give the matter of saving for others as much thought and attention as he would if he were in business for himself, and he should ever bear in mind the old maxim, "A dollar saved is a dollar made."

*A paper read before the Executive Board of the National Association of Pharmacologists in Columbus, Ohio, and especially contributed to the BULLETIN.

DRUG-STORE SKETCHES.

ANDREW AND IMOGENE.

BY ROY FULKERSON.

"Well," remarked Imogene, "I see that Dr. Wiley is talking again."

Andrew rose from his chair, and said in a deep voice: "Mr. President, I move to strike out the word 'again' and insert in lieu thereof the word 'yet.'" He sat down and stuck his thumb in the arm-hole of his vest.

"Motion lost," remarked Imogene. "He is talking to the point this time. He is getting after the drug stores for their methods of doing business, and I believe he is right. It strikes me they are very unaccommodating!"

"Drug stores unaccommodating?" Andrew fairly yelled. "For the love of heaven, dear lady, where do you expect to find any one in this world of gum boils, stone bruises, and gas bills who will be as accommodating as your mother or the drug store on the corner?"

"Well, ours is not accommodating, anyway," she replied spiritedly. "I 'phoned over this morning and asked the druggist if he wouldn't send word in to Mrs. Simkins, two doors above there, and ask her to give me her recipe for making chili sauce, and then 'phone it to me, and the saucy thing said he didn't have time to send, but he would look in the Pharmacopœia and see if there was a recipe for it there. Dr. Wiley says that everything which has no therapeutic effect should be eliminated from the Pharmacopœia, too!"

"Well," said Andrew, "the Doc can tell you all about the therapeutic effect of chili sauce when combined with frankfurters and beer! He is an authority on everything from the age of whisky to the penalty for splitting openers without announcing it, and is always willing to express his opinion! He has a stock of opinions equaled only by the King's Palace stock of football players!"

"Why," said Imogene, "do they sell football players?"

"Nope," said Andrew, "they raise 'em! But what about this drug-store business? You have not proved your case."

"Well, they are not nice, that's all. I buy lots of little things at their store, and I think they might at least have carried the message for me."

"Well, maybe you are right, dear," said Andrew a little mollified. "What have you bought at the drug store this week?"

"Well, let me see," said Imogene, counting on her fingers, "I bought 10 cents' worth of postage stamps there Monday, and Tuesday I bought—let me see—no, I didn't buy anything Tuesday, I only went over to look at the directory; but Wednesday I bought a jar of vaselin and used their 'phone, and it is one of those stingy ones that you have to drop a nickel in, and Thursday I got a lemon phosphate, and Friday I 'phoned and they sent me a package of cough drops!"

"Dear, there is little doubt but what that man is getting rich off of this family!" Andrew wrinkled the corners of his eyes. "No wonder he has an automobile."

"I don't care, you can laugh if you want to!" She was getting angry. "But I know they are unaccommodating! Mrs. Adams bought a box of pills there for Willie, and she only used six out of the dozen the doctor ordered, and they absolutely refused to exchange the other six for ice-cream cones! Willie took them over when he was well again. You know yourself, that all the stores exchange things now if you don't use them!"

"The mean thing," laughed Andrew, "he could have sold them if he had put a sign in his window, 'Six slightly used pills for sale at a reduction.'"

"I know another case, too, where they were not nice," persisted Imogene. "A friend of mine has a dachshund, and it seemed sick one morning, and she 'phoned over and told the druggist that Lena hadn't eaten anything all day, and asked what to do, and he 'plioned back that she better put an ice-bag at her feet and send for the doctor. But the dog wouldn't stand on the ice-bag at all, and she always believed he knew she wouldn't!"

"I guess you are right," said Andrew, "and I'm not going to vote for a single druggist for director of the Chamber of Commerce."

"Are some of them candidates?" inquired Imogene.

"I don't know," said Andrew, "but every one else is."—*Washington Times*.

MORRISON: "I bet the man who ran his auto over Snodgrass is sorry."

HARRISON: "Why do you think so?"

MORRISON: "Snodgrass was wearing a scarf-pin that punctured the fellow's tire."—*Chicago News*.

BOARD QUESTIONS ANSWERED.

AN INDIANA EXAMINATION. PHARMACY.

(Continued from January BULLETIN.)

13. Criticize the following prescriptions:

R (a) Morph. Sulph.gr. ii.
Potass. Cyanide.....gr. ss.
Syr. Toluq. s. ad \mathfrak{z} iv.

M. Sig.: \mathfrak{z} i every 3 or 4 hours.

(Write directions in English.)

R (b) Strych. Sulph.gr. ii.
Ac. Arsenios.gr. iv.
Ferrum Reduct.gr. xxiv.

M. ft. Pil. No. xxiv.

Sig.: Unum ter in die post cibum.

(a) Potassium cyanide precipitates morphine usually as the free alkaloid, due to the alkalinity of the potassium salt, although some may say that morphine cyanide is precipitated. The last teaspoonful might contain a dangerous dose. One teaspoonful (1 drachm) every three or four hours.

(b) There is too much arsenic in the pill. The dose of arsenous acid is 1/60 to 1/20 grain. Here 1/6 grain is contained in each pill, which is too much for any one not habituated to arsenic.

[Having just received a copy of the new edition of Caspari's Treatise on Pharmacy, we have largely used that excellent book in compiling this instalment of Board Questions Answered.]

AN ILLINOIS EXAMINATION. CHEMISTRY.

1. State the official forms of ammonia; percentage strength of each, and U. S. P. process of determining them. Give at least two methods for preparing ammonia. State its properties and chemical formula.

Ammonia water and stronger ammonia water. The former contains 10 per cent, by weight, of gaseous ammonia, the latter 28. To assay, introduce into a stoppered weighing bottle 3 Cc. of ammonia water and weigh accurately. Dilute with 50 Cc. of distilled water and titrate with normal sulphuric acid V. S., using litmus or methyl-orange T. S. as an indicator. Multiply the number of Cc. of the normal sulphuric acid V. S. consumed by 1.693, and divide this product by the weight of the ammonia water taken. The quotient represents the percentage of ammonia gas. Ammonia is obtained

in the manufacture of illuminating gas by the destructive distillation process: coal is heated in retorts, and most of the nitrogen contained in the coal is converted into and liberated as ammonia gas, which is absorbed in water, through which the gas is made to pass. Another method of obtaining ammonia is through decomposition of ammonium salts by the hydroxides of sodium, potassium or calcium. Usually ammonium chloride is mixed with calcium hydroxide and heated, when calcium chloride, water and ammonia are formed. Ammonia, NH_3 , is a colorless gas of a very pungent odor, an alkaline taste, and a strong alkaline reaction. In pure oxygen it burns, forming water and free nitrogen. By the mere application of seven atmospheres pressure or by intense cold (-40°C.) ammonia may be converted into a liquid which at -80°C. forms a solid crystalline mass. Dissolved in water ammonia forms ammonium hydroxide NH_4OH , the trivalent nitrogen becoming five valent.

2. Define compound radicals and illustrate or explain how they may be monovalent, divalent, etc.

A compound radical is an unsaturated group of atoms known to enter as a whole into different compounds, but having no separate existence. For instance: The bivalent oxygen combines with two atoms of the univalent hydrogen, forming the saturated compound H_2O , water. If we take from this H_2O one atom of H, there is left the group of atoms HO consisting of an atom of oxygen in which but one point of attraction is actually saturated, the second one not being provided for.

This group, HO, is a radical or residue which enters into many compounds.

According to the number of points of attraction left unprovided for in a radical, we distinguish univalent, bivalent, trivalent and quadrivalent radicals. Carbon is a quadrivalent element forming with the univalent hydrogen the saturated compound CH_4 . By removal of one-, two- or three-hydrogen atoms the radicals CH_3' , CH_2'' and CH''' are formed.

3. Write the chemical formula for the following: Blue vitriol; copperas; saltpetre; salammuniac; litharge.

$\text{CuSO}_4 + 5\text{H}_2\text{O}$; $\text{FeSO}_4 + 7\text{H}_2\text{O}$ in an impure state; KNO_3 ; NH_4Cl ; PbO .

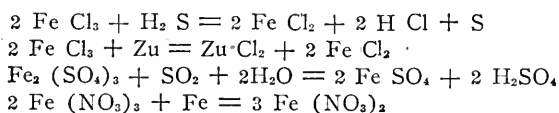
4. Describe sodium benzoate and give method of preparation. (a) For what purpose is this product frequently used? (b) How would you detect its presence?

A white, amorphous, granular or crystalline pow-

der; odorless and having a sweetish astringent taste. Add to 10 parts of benzoic acid suspended in 20 parts of hot water, gradually, 7 parts of sodium bicarbonate. After the evolution of carbon dioxide has ceased, neutralize the liquid exactly by the addition of a little benzoic acid, or if necessary with sodium bicarbonate. Filter and evaporate with frequent stirring until the residue weighs between $13\frac{1}{2}$ and 14 parts. As the salt separates, it creeps up on the sides of the dish, and should therefore be frequently scraped off and returned to the liquid portion. When sufficiently concentrated the mass is stirred until cold, when the remaining water will evaporate. The yield is $13\frac{1}{4}$ parts. This salt being very efflorescent, the U. S. Pharmacopœia requires it to be anhydrous, for which purpose the above solution is evaporated to dryness when the yield is $11\frac{1}{2}$ parts. (a) As a preservative for canned goods, catsup, etc. (b) If the benzoic acid is present in foreign matter it is first extracted with ether. The ferric chloride test consists of neutralizing with ammonia and adding a neutral ferric chloride. A flesh-colored precipitate of ferric benzoate is produced. The color is very characteristic if the solution being tested is colorless. Then there is the sublimation process of evaporating the ether solution on a watch-glass, placing another over it. This is heated on a steam bath. If benzoic acid is present, it will sublime in crystals which can be identified by the melting point.

5. Give two methods of reducing ferric salts to the ferrous state. Illustrate by equation.

Ferric salts are reduced to ferrous by H_2S . They are also reduced by SO_2 and by being heated with iron or zinc:



6. Define (a) basic salts; (b) double salts. Give example of each with chemical formula.

(a) Basic salts are salts containing a higher proportion of a base than is necessary for the formation of a normal salt. Instances are basic mercuric sulphate $\text{HgSO}_4(\text{HgO})_2$, basic lead nitrate $\text{Pb(NO}_3)_2 \cdot \text{Pb(OH)}_2$. According to modern views, basic salts are looked upon as derived from bases by replacement of part of their hydrogen by acid radicals. In the base lead hydroxide Pb(OH)_2 , one of the hydrogen atoms may be replaced by the radical of nitric acid, when basic lead nitrate,

$\text{PbNO}_3 \cdot \text{OH}$, is formed. In bismuth hydroxide, Bi(OH)_3 , one, or two, or three hydroxyls may be replaced by nitric acid when the salts $\text{BiNO}_3 \cdot (\text{OH})_2$, $\text{Bi(NO}_3)_2 \cdot \text{OH}$ and $\text{Bi(NO}_3)_3$ are formed. The first two compounds are basic salts, while the third one is the normal salt. (b) Double salts are salts formed by replacement of hydrogen in an acid by more than one metal. For instance: Potassium sodium sulphate, KNaSO_4 .

7. Explain the reaction and show by equation the product formed when a solution of bismuth in nitric acid is added to water.

By dissolving metallic bismuth in nitric acid, a solution of bismuth nitrate is obtained, nitric oxide escaping — $\text{Bi} + 4\text{HNO}_3 = \text{Bi(NO}_3)_3 + \text{NO} + 2\text{H}_2\text{O}$.

If the solution be poured into a large quantity of water, the salt is decomposed with the formation of bismuthyl nitrate (bismuth subnitrate) and nitric acid, which latter keeps in solution some bismuth — $\text{Bi(NO}_3)_3 + 2\text{H}_2\text{O} = \text{BiONO}_3 \cdot \text{H}_2\text{O} + 2\text{HNO}_3$.

8. How are the following affected by exposure to the air: Potassium carbonate; zinc chloride; sodium sulphate; lime-water and ammonium carbonate? (a) Are the changes which take place in any of these chemical changes?

Potassium carbonate deliquesces, absorbs moisture, forming a colorless or yellowish liquid of an oily appearance. Zinc chloride absorbs moisture. Sodium sulphate crystals effloresce or lose their water of crystallization, leaving a white powder. Lime-water becomes covered with a pellicle of calcium carbonate. Ammonium carbonate parts with ammonia and carbon dioxide, becomes opaque, and yields a white powder of acid ammonium carbonate. (a) Yes, the last two.

9. What is "iron by hydrogen?" Describe method of preparation and show equation.

Ferrum reductum. Ferric hydroxide is made by precipitating a solution of ferric sulphate with ammonia water as directed in the Pharmacopœia. The hydroxide is dried and then introduced into an iron tube and heated to dull redness in a current of hydrogen gas, which is freed from acid vapors and other products by passing through a solution of potassium permanganate, basic lead acetate, and sulphuric acid. After hydrogen ceases to be absorbed, the reduced iron is allowed to cool in the hydrogen to prevent reoxidation, and is then preserved in dry-stoppered bottles. The reaction is $\text{Fe}_2\text{O}_3 + 6\text{H} = \text{Fe}_2 + 3\text{H}_2\text{O}$.

(To be continued.)

SELECTIONS.

THE RETAILER AND HIS CREDIT.

In an address delivered by S. D. Rider, vice-president of the South Bend Watch Company, before the last convention of the National Association of Retail Jewelers, several matters were discussed which retail merchants in every line should give special consideration if they are to approach business success.

"Discounting all bills," said Mr. Rider, "is the open sesame to the markets of the world. And no matter how small or how large a business one is doing, if he discounts all bills, every firm from the Atlantic to the Pacific and from the Gulf of Mexico to the Lakes will be anxious to open an account with him for any reasonable amount. But I hear it said, 'My capital will not permit my discounting my bills.' To that I say, figure out how much additional capital would be required to discount all bills and how much would be saved each year by securing this capital.

"I dare say that many have never done this, but let me suggest that every retailer total up his indebtedness and see what it would cost to secure enough additional capital to make possible the discounting of all these bills. Then figure the profit which can be made by so doing and it will be found quite astonishing.

"Right here let me give an illustration of the value of discounting bills.

"Several years ago a young man of my acquaintance entered a western city and embarked in the retail business with a total cash capital of \$1500, that by frugality he had saved from his small salary. He rented a store at \$1250 per year for five years, and then proceeded to purchase as many goods as he could pay for. He also cultivated the acquaintance of the cashier of the bank where he did his business, and a few weeks after opening his store borrowed a sum of money from the bank and increased his stock.

"He had rented a large storeroom and his limited capital did not allow him to carry as large a stock as he desired, but he persisted in discounting all bills and buying closely. At the end of the first holiday season it was necessary to fill his store shelves and counters with empty boxes as his stock was cleaned out, but he was able to pay off his loan at the bank and had a surplus besides.

"The next year he borrowed a larger sum, but continued to discount his bills. Every one was anxious to sell him, for his credit was without a blemish. In a few years he had increased his stock in the original store to over \$1500 and opened several branch stores. To-day he is connected with several strong financial institutions in the city in which he resides.

"You may say, 'That sounds good, but how am I going to do it.' I say, 'Make your business fit your capital.'

"The secret of his success was that he made his business fit his capital. And this leads me to one or two axioms I desire to propound.

"First, no man should go into business unless he has a reasonable amount of money and above all be sure that he knows something about the business that he is entering into.

"Then he should buy only as many goods as he is reasonably sure that he can pay for and discount all his bills.

"Starting out with a certain capital, he should estimate the amount of business that he feels that he should be able to do monthly. Deducting from this his store and personal expenses, he should then buy only as many goods as he can reasonably expect to pay for promptly when due.

"He should keep a careful record of all goods purchased, when they are to be shipped and when he can save his discounts; then limit his purchases absolutely to the amount that he has estimated will be available for paying bills from month to month, and he is sure to win. If his sales are better than he expected, he can buy more goods. He can send in mail orders for the most profitable sellers. On the other hand if his sales are less than expected, purchases should be curtailed, but every effort should be made to stimulate his sales so that they will equal the amount estimated.

"There are also many retailers who are to-day extraordinarily successful, and this is due to the fact that they have jealously guarded their credit, while other men of equal merchandising ability have been complete failures because they have not realized the necessity of conserving their credit and have lost the confidence of those from whom they could secure the most desirable merchandise, and have finally dropped out of the race.

"One more point is very important, and that is the giving of statements to commercial agencies or

to individual inquirers. Many merchants seem to feel that they should not be expected to do this. But let me ask, how is the jobber or manufacturer going to be able to do justice in extending credit if one refuses to inform him honestly and frankly concerning his financial condition?

"Many a man who is entitled to unlimited credit is handicapped immeasurably by his refusal to make a statement to the commercial agencies and remains a small dealer all his life, when with the proper credit rating he would be entitled to purchase direct from the largest wholesalers.

"It must be remembered that a concern selling to thousands of customers cannot possibly know each one personally, but must rely on cold-blooded facts as gleaned from numerous inquiries in order to extend credit ratings intelligently.

"The entire business of this country is conducted largely upon credit or confidence; and to coöperate with organizations that make the gathering of information about credit their business should be the purpose of every retailer, as it is ultimately to his advantage to impart this knowledge to the houses that publish ratings."

A QUAIN T CUSTOMER AND A QUEER SIGN.

J. M. Brooks, of Clifton, Texas, in a paper read before the Texas Pharmaceutical Association, narrated a little experience which is indeed amusing. To quote:

As a pioneer druggist in a local option school district in a country town in '81, I had just set up a modest little business in a small wood house, which had been used, previous to my occupancy, for general merchandise, and still bore the sign on two boards tacked to the front of the building above the door, thus:

DRY GOODS
AND
GROCERIES.

There was no practical painter in the place, but an all-round, handy fellow, good for any job that offered. I asked him if he could paint me a drug sign and take the other down. He said he thought he could and was perfectly willing to try. I told him the simple word "DRUGS," on a piece of canvas, was all I wanted at present.

I furnished the cloth and the lampblack, and he painted the sign and put it up, for which I gave him a quarter and paid no further attention to it.

A day or two later I had a rather quaint customer call. He rode a long sloomy horse that bore marks of hard service. He was well seated in a deep saddle with boot toes protruding far through iron stirrups. In front were a roll of blankets, a coil of rope, a long whip, and a branding iron.

Behind were strapped a yellow slicker, coffee pot, frying pan, and tin cup. I did not look in the saddle pockets.

He wore a broad-brimmed, tall, white hat with harness leather band, a red handkerchief, colored overshirt, fringed leather leggins, boots, and belled spurs.

Riding up to the little platform in front of the door, mechanically and rather gracefully lifting his off-foot clear over the kitchen department and setting it upon the platform, and throwing the long reins over without hitching, he turned into the store. Had he not been previously observed his loose spurs with rowels jingling against the floor as he walked would have announced his entrance.

As he neared my position I asked him if there was anything I could serve him with to-day. With a mingled expression resembling a cross between a wild westerner and civilization, a look of complaisant significance with a kind of sunburnt preface, he replied, "Yes, I want about a 50-cent bottle of AND!" Not comprehending his meaning, I asked, "What is the want, please?" He said, "Some AND, AND, about a 4-bit bottle—handy for the hip pocket—now do you understand?"

I had to beg pardon again, and guessed I did not have it in stock, but proceeded to ask him how it was put up, how it looked, etc.

After pronouncing the bad place, he says: "It is put up in bottles, jugs, canteens, walking canes, pocket Bibles, powder horns, and various other ways, according to the circumstances under which you get it. It looks good, smells good, tastes good, feels good, and is good if it's a good article. Come now, hurry up, come across, I am in a hurry, I am onto my job, I can read between the lines, I have been in local option districts before—besides, no harm can come to you. There will be nobody to report it. I am passing through and will never be here again."

When I, with difficulty, finally convinced him I did not carry the article he wanted, and as he turned to leave, with a look of chagrin and disappointment, he retorted, "If you don't keep it you better take down your sign!"

When he was gone I wondered on his meaning of "take down your sign." I went out and looked on the front of the building. I found that the boy who painted my new sign had taken down the old one as instructed, but had left the part that was lettered on the house and tacked my new drug sign just above it, so my sign now read: "DRUGS AND."

THE EVIL OF LONG HOURS.

If we were asked to point out the one particular thing which does more than any other one thing to prevent the practice of pharmacy from becoming the agreeable, respectable, and fairly profitable calling that it by right ought to be, we would without hesitation name the almost universal long week-day and Sunday hours which those who follow that calling seem to find it necessary to put in.

The "theory" upon which the practice of keeping the pharmacy open at unseasonable hours and times is based is that it is necessary in order to supply medicines for the sick; but there is not a pharmacist in the entire country who does not know this to be untrue, or who would not be compelled to admit if "put to it" that all of the legitimate dispensing of drugs and medicines done by a score of average stores on Sunday and after the usual business hours on other days could be done by a single establishment without unreasonably working the employees thereof.

The theory does not fit the facts, and we should either change the practice to correspond, or get another theory.

No other calling, no matter how important to life and health, finds it necessary to prolong its hours of daily and weekly service to the extent that they are prolonged in the drug business. The theory that it is necessary for the druggist to do so is a fiction and a fraud.

The real reason why the druggist works while other people are either sleeping or recreating is partly the force of long established custom, and partly the desire to capture the trade for other things than drugs and medicines which he fears might go elsewhere if his store was not open at such times.

What follows to the bow always bent, to the spring always upon the stretch, inevitably results to the brain and nervous system always upon duty; all alike lose their elasticity, and the ability to render efficient service in the time of need.

Here and there some adventurous spirits have broken away from their bondage, but their example and unanimous testimony to the effect that they are better off financially has had but little effect upon those who are still in slavery. The latter still hold the nickels that come from soda and cigar sales so close to their optics that they cannot see the dollars that might be gained by the possession of an intellect reinvigorated and a physical system restored by the proper amount of rest and recreation.

Is it really worth while? Does it pay to give up health, family, companionship, and the joy of living in return for the meager receipts from later hours and Sunday business?

Why not give up the Sunday business and be your own man one day in seven? Why not one day in the week exchange the close smell of the drug shop for the breath of God's out of doors in the fields and parks, and have some of the life, liberty and pursuit of happiness said to be yours by the Declaration of Independence?

You will live longer, enjoy a broader horizon while living, and die both richer and happier.

If your fellow druggist cannot be persuaded to join with you, then leave him to his bondage, but don't be a slave yourself because he declines to be free.—Editorial from the *Midland Druggist*.

SELLING SOAP AT A PROFIT.

In most sections the trade in toilet and medicated soaps is so subject to competition that there remains little or no profit. For this reason druggists often overlook the importance of the soap trade, and fail to apply the means to remedy the evil.

The trade in toilet soap and more particularly the trade in medicated soap was created by the drug trade. At the present time the dry goods man, the grocer, and the fancy goods shop, and even the barber, is a competitor. In consequence of this prices are cut and quality sacrificed.

Druggists can help to overcome this adverse condition by a little well directed effort. Our suggestion would be that while the druggist should carry in stock all of the popular brands even though he may be obliged to sell them at little or no profit, he should select a few kinds that belong exclusively to the drug trade and put them in the lead. This he can do by keeping the cut-rate soaps in the back-ground, or out of sight. Then he will be able to

concentrate the attention of the customer upon the kinds which he prefers to sell.

It is, of course, imperative that the kind of soap which he shall elect to push shall be the best that can be had. It might be well here to caution druggists against any sort or kind of "name goods" brand of soap. It is well known in the soap trade that the spoiled batches of soap are reserved at the soap factory to be made over into soaps for the trade who demand goods under the buyer's name.

We also call particular attention of the druggist to a well-founded and growing prejudice against cake soaps. This prejudice against cake soap is warranted for the reason that under the stress of competition and cut prices cake soaps have been made up of poor fats, poor chemicals loaded with all sorts and kinds of stuff and fillers until they are worthless, and some of them dangerous. It has also come to be known that cake soaps are unclean, that they hold and harbor germs, skin excretions, and it is claimed that through their use disease can be transferred. Physicians now uniformly use and recommend either liquid or paste soaps.

Here seems to be a chance for druggists. They possess just the technical knowledge, and hold the ear of their patrons, and can turn this tide of prejudice to their profit. Soaps sold over the drug counter, when surrounded by a technical professional value, and provided that the soap is a quality to merit this assumption, will bring a higher price, and the customer will come back for more.—*Red Cross Messenger*.

UNWASHED FRUIT.

A danger that is too little appreciated even by many of our most intelligent and fastidious people, is unwashed fruit. In cities like New York, where so much fruit is sold on the streets from open carts and stands, the evil is increased tenfold. Apples, pears, peaches, grapes, berries and other fruits that are eaten uncooked are the chief offenders, and examinations that have been undertaken show a variety of germ life that would be astounding if the bacterial contamination liable to result from street dust was not already known. Flies are another great source of contamination.

It will be claimed by some that the organisms thus found on fruit are largely if not wholly harmless, and this is unquestionably true. But enough patho-

genic bacteria have been repeatedly demonstrated on these common articles of food, particularly when exposed to flies, to make it certain that the present danger is very real.

Many city ordinances require that all fruits—and vegetables too—be screened. This, if followed, reduces the evil somewhat, certainly in respect to flies, but little protection is afforded against dust. In spite of the utmost care, this is bound to accumulate, and with the inevitable contamination from handling, insures myriad colonies of bacteria on every piece of fruit.

All fruit, therefore, that is not cooked should be thoroughly washed. It is hard to impress children with the urgent necessity of this, and they are the ones most endangered. Realization of the constant tendency to cholera infantum, intestinal disorders, and the graver diseases like typhoid fever emphasizes the necessity of preaching, and teaching every one, from the youngest toddler up, never to carry a bit of fruit to the mouth until it has been washed—and well washed.

This is only one small detail in the general movement to eliminate or at least to reduce the possible causes of disease. To many, who recall their care-free youth and remember that they came through unscathed, though they ate anything and everything in the way of fruit, with never a thought of washing it, the foregoing may seem trivial. But there is another picture of thousands and thousands of graves of little martyrs who did not come through unscathed. Every year acute intestinal affections claim an appalling toll of children and young adults. The cases that are directly attributable to unclean fruit may be few or many. That there are any is enough to show the danger, and once shown there can be no two opinions as to the necessity for its removal.—*American Medicine*.

WHY SOAP CLEANSSES.

Some interesting details are given in *La Technique Moderne, Hospital*, concerning the researches of M. W. Spring, a Belgian chemist, into the processes whereby soap cleanses. It has been stated that the cleansing properties of soap are due to its combination with the soiling substance, but this only half explains the question how soap acts. An explanation is still required as to why it disappears after having taken up and entered into combination with

the dirt, or, in other words, why the compound is removed. The author, after studying the action of soap upon various soiling substances, such as lamp-black, clay, red chalk, silica, cellulose, etc., comes to the conclusion that the cleansing of an object consists in a process of substitution. There is brought about a colloidal combination of the soap and the soiling substance, which, by reason of its constitution, no longer has the power of fixing itself by absorption on to the solid body, with the result that it is easily carried away by the water. Thus in washing with soap one puts it in contact with one's soiling substances, these latter having a greater affinity for the former than for one's skin. The process does not end here, for soap in its turn has even a greater affinity for one's skin than for the substances, which it proceeds to replace and to set free to be taken up by the water and removed. The dirty substances have a chemical action on the fresh solution of soap and water, resulting in the formation of an acid salt, with which they agglutinate themselves. This compound of colloidal absorption is due to electrical action. The constituents have different electrical polarities. The compound is

stable and can pass through a filter-paper without soiling it.—*Practical Druggist*.

TO DESTROY THE DOMESTIC FLY.

A circular recently issued by the American Civic Association gives a number of practical hints as to the best methods of ridding houses of flies, and they deserve to be known and put to a practical use. The circular says: "Provide screens for houses and food. Keep garbage receptacles securely covered. Remove stable manure every three or four days or disinfect with lye, chloride of lime, or crude carbolic acid. To clear a room of flies heat a shovel or any similar article and drop thereon 20 drops of carbolic acid; the vapor kills the flies. A better and cheaper plan is to put a spoonful of formalin in a gill of water and expose it in the room. Another is to dissolve one drachm of bichromate of potash in two ounces of water, add a little sugar, and place the solution in shallow dishes about the rooms."

A campaign conducted on these lines will do much to rid a household of this insufferable and dangerous pest.



A NEAT CIGAR DISPLAY.—This trim appeared in the window of W. E. Sherriff, of Ellsworth, Kansas, having been set up by H. M. Curry. It consisted largely of dummies and signs sent out by the manufacturers, although a few of the placards were home-made. There is a pyramidal effect in the grouping, the base consisting of boxes while the top is made up of Tom Moore and Henry George pictures. The mechanical arrangement of the trim leaves little to be desired. In the center is a large sign devoted to Tom Moore cigars, while at the left is one on the Henry George brand. The display proved very effective.

DOLLAR IDEAS.

A WANT LIST ADJUNCT.

S. Palmer, Shreveport, La.: Every well-regulated drug store keeps a "want list." Proprietor and clerks will always (?) note shortage of items usually kept in stock. But what becomes of the numerous calls for items not usually carried in stock?

They are "passed up," but why? One may be open for business and have expenses accumulating right along; still six different clerks may each have a call for an item from as many different customers and each one fail to note it because, as he explains, "It is not in our line." Every retail store carries a vast number of side-lines having no relation to the drug business proper. Some time ago I advised the following blank form with pleasing results:

SALE LOST.	
	Date.....
Item.....	
If in stock state why the sale was lost.	
.....	
Clerk.....	

These forms I had printed and padded, and placed in convenient places. The clerks filled them out and filed them. At night I would go over them and see what my trade was demanding, and would use my judgment on the advisability of buying the things asked for.

SUCCESSFUL PLAN FOR ADVERTISING CASTILE SOAP.

C. P. Rice, Martins Ferry, Ohio: The following plan proved splendidly successful in procuring a good Castile soap trade as well as advertising and boosting the sales of our olive oil.

On a Monday we dressed our window very neatly and abundantly with eight-ounce bars of pure Castile soap and the best five-cent honeycomb washcloths we could obtain. In the center we adjusted a 14x22 inch show card appropriately worded: "Saturday Only, an Eight-ounce Bar Pure Castile Soap and a Honeycomb Wash Cloth, 10 cents." We also set up two 11x14 inch cards, one saying: "This Castile Soap is Absolutely Pure, being the Product

of Pure Olive Oil," and the other, "Remember this Offer is for Saturday Only." Our space in the local papers was occupied by the same signs.

We positively would not disturb the window for any one until Saturday morning, and by noon that day the window was ready to be redressed.

The combination cost us between nine and ten cents, but our later sales on Castile soap soon repaid us for the small profit made on our "Saturday Only" display.

During the week we had the soap display in our window we talked up olive oil at every available opportunity and continued the interest in olive oil by following the soap display with one of pint, quart and gallon packages of olive oil.

The plan enabled us to clinch the Castile soap and olive oil business of our community.

EXPLOITING BRUSHES.

W. C. Peters, New Philadelphia, Ohio: A good advertising stunt which we engineered several years ago, and which not only produced good results but made my store talked of for a week, was the following:

First we placed in our window hundreds of brushes of all sorts, hair, cloth, bath, tooth, nail, camel's-hair—in fact all the brushes in our stock. These we placed in one huge pile, with the camel's-hair brushes (about 200) in the center covered by the other brushes.

Then we inserted in different places in our daily paper the following, without any name attached thereto: "How many brushes in a brush pile?" In fact whatever part of the paper one looked, this question stared him in the face. When it appeared the second and then the third time, every one was asking, "How many brushes in a brush pile?" and "Who's running that ad?" Then on the fourth day we used large space with the following ad.: "\$5.00 in gold to the customer guessing, 'How many brushes in a brush pile.' The brush pile is in our window—see it!" Of course our name going with the last large ad. In our window we had a large card with the following: "How many brushes in this brush pile? A guess with every purchase. \$5.00 in gold to the nearest correct guess."

We closed the contest in one week, and found that our sales had increased 33½ per cent, and during the week we had sold more brushes than we had in the preceding ten.

A NEW WAY OF MAKING LIME-WATER.

F. W. E. Stedem, Philadelphia, Pa.: In cleaning up my lime-water jar recently it occurred to me that our plan of making and storing lime-water might be of interest to others; therefore this description.

Procure a twenty- or thirty-gallon stone crock. Drill a hole through the side about twelve inches above the bottom and into this aperture fasten an ordinary plumber's spigot. Shake, fill, and wash several times, drawing off the wash product by means of the spigot until all of the undesirable, soluble impurities are removed, then fill up with water, mix well, and allow the lime to subside to the bottom of the crock below the spigot. When lime-water is wanted, merely tap the spigot and draw into the dispensing bottle the quantity desired.

This method insures not only a clear water of constant saturation, but enables one to make quite an ad. of their lime-water through an occasional exhibition in the store. A peck of lime will permit of refilling the jar at least ten times.

REMOVING SCREW-CAPS OR LIDS.

Frank Green, Jr., Skidmore, Mo.: Often druggists find a screw-cap or lid which they cannot remove easily from a can or bottle. I have always found the following method works successfully:

Take a piece of strong cord long enough to loop sufficiently at both ends and wind it about one and a half times around the cap or lid, finally running one end of the cord through the loop on the other half. Turn the projecting or free end backward, having first passed a stick of wood or a bar of iron through it. The bar or stick serves as a lever which may be set against the cap or lid and turned like a wrench. If the cord slips around the cap or lid, use a little rosin on it, and this method will surely prove a success.

DISPENSING CAPSULES, TABLETS, PILLS, SUPPOSITORIES, ETC.

Frank Green, Jr., Skidmore, Mo.: I think this a good idea for dispensing capsules, tablets, pills, suppositories, etc.: After placing the required number of capsules, tablets, pills or suppositories in the box, fill the remaining space above them in the box with cotton. This prevents rattling, breaking, etc., and impresses the customer with the neatness and care of one's dispensing.

LETTERS.

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MORE FROM MR. DUNNING ON THE PHARMACY OF "606."

To the Editors:

Since completing my article in the January BULLETIN I have improved the method of preparing for injection a

NEUTRAL SUSPENSION OF SALVARSAN.

The improvement consists in making the alkaline solution as directed under the neutral suspension method, using however a 4-ounce Erlenmeyer flask which is supported in a 4-ounce evaporating dish.

When using 0.6 "salvarsan" the alkaline solution is diluted to 100 Cc. with sterile water and filtered repeatedly through a tight pledget of sterile cotton until entirely free from extraneous matter; an extra flask having been provided to receive the filtrate. This solution is carefully neutralized in the manner previously suggested, and the resulting suspension is centrifuged as follows: A 15 Cc. graduated centrifugal tube is filled with the suspension and centrifuged until the suspended material measures not more than 3 Cc.; the supernatant fluid is pipetted off and discarded. More of the suspension is poured into the tube and the operation repeated until the amount of suspension has been reduced to about 12 Cc.; this being transferred to a beaker, the residue washed into it from the tube with a few cubic centimeters of sterile water, and the whole thoroughly mixed with a glass rod. This procedure gives by far a finer suspension than any method I have tried, and besides, the suspension is entirely free from extraneous matter. *It is, however, much more tedious than the first method suggested.*

All utensils must be carefully sterilized.

To those not possessing a centrifuge the following plan is offered: Instead of diluting the alkaline solution to 100 Cc., dilute it to 12 Cc., filter in the manner and with the precaution just described, and carefully neutralize with normal acetic acid, finishing with decinormal.

The suspension is not quite so fine as by the other method, but it is free from little specks and fibers.

I should like also to call attention to some precautions necessary to be observed in the handling of this chemical. When a vial is opened it should all be used, any remainder being discarded. The chemical readily deteriorates in contact with air. The suspensions or solutions should be almost immediately used after preparation. Within an hour or two some decomposition is noticeable.

THE ALKALINE SOLUTION METHOD.

I have recently prepared seven doses of Salvarsan by the alkaline solution method, all of which were injected into the buttocks. Compared with the pain caused by the suspension method, which I have just described, there is very much less discomfort. Besides, the method of preparation is much simpler. The method used was essentially the same as that which was published in the January issue of your journal, but on account of larger experience I am able to give some further improvements, and will therefore restate the method.

Into a wire basket, about 5 inches in length, 4 inches in width, and $5\frac{1}{2}$ inches in depth, is placed, wrapped in gauze, a 4-ounce porcelain dish, 2-ounce beaker, 2 glass rods, about 4 inches long, 1-ounce funnel, 30-Cc. conical graduate, some absorbent cotton, and small pieces of gauze, the whole being thoroughly sterilized, preferably in an autoclave. A 25-Cc. glass stop-cock burette is also sterilized. The beaker is placed in an evaporating dish, and 0.6 of Salvarsan is emptied into it; then 1.3 Cc. 4 normal sodium hydroxide is added and the mixture triturated until a perfect solution results.

Ten Cc. of sterile water are now added and mixed, the solution being filtered and refiltered through a pledget of sterile cotton contained in the funnel and into a 30-Cc. graduate, the funnel and cotton being washed with enough water to make about 12 Cc. To this solution, with constant stirring, is added, drop by drop, the decinormal sterilized acetic acid, from the sterile burette mentioned, until a slight opalescence is produced and remains permanent; about 10 Cc. of the acid will be required.

The advantage of this modification is that it insures, in the first place, a perfect solution of the Salvarsan, from which all extraneous matter is removed, and also insures a minimum degree of alkalinity and yet permits the injection of the substance in the form of a solution. This method of back neutralization is the only one which I have

seen published which will give a preparation as nearly free of alkali. It will be observed that the amount of 4 normal sodium hydroxide solution used to dissolve Salvarsan is not sufficient to form the bisodium salt, but is a little in excess of that which is required to form the monosodium salt, the excess being afterwards neutralized.

Let me say finally that there was a slight error in my article last month. Everything should be omitted in the fourth paragraph from the end except the first sentence: this matter should have been stricken out, but it evidently escaped my attention.

H. A. B. DUNNING.

Baltimore, Md.

A SOUTHERN CALL TO ARMS.

To the Editors:

Taking my own State as an example, in nearly all the examinations of the State Board of Pharmacy this question is asked: "What is Pharmacy?" and the applicant is expected to answer as follows: "Pharmacy is the *science* which treats of medicinal substances. It comprehends not only a knowledge of medicines and the art of preparing and dispensing them, but also their identification, selection, preservation, combination and analysis."

From a scientific point of view this is the proper answer, but from a general point of view it does not hold good, because I for one can prove that in many cases pharmacy is a common business operated by every Tom, Dick, and Harry. Isn't that fierce? It is fierce; it is sad to have to mention it; but it is still worse to have to admit that it is a *sound, frozen-bottom fact!* If every pharmacist were honest with himself I feel certain that he could name from ten to twelve unlawful acts. I for one can, and I can prove it.

Here is an example: Mr. Doctor comes to the conclusion that a drug store attached to his office would be very convenient, and likewise of advantage to his patients. Naturally he looks at the step merely from a philanthropic standpoint, but strange to say, after giving the matter careful consideration, he realizes that the business will not justify the paying of a registered pharmacist's salary. He is not after the profits—certainly not. It is all merely for the sake of convenience. But nevertheless he gets an "assistant pharmacist" instead of a full registered man, and even more often a man who is

not even an assistant. Now, is that not *his finish*? Am I right? Am I wrong? If I am right, then why not get busy and put a stop to it? If I am wrong, then pharmacy is not what it has been taught to be.

I wish to call attention to the fact that the present standard required by a State board examination in pharmacy directly indicates that to be a pharmacist you have to equip yourself in accordance with the answer to the question of "What is Pharmacy?" and in addition have a knowledge of chemistry, botany, materia medica, physiology, etc. Hence pharmacy is bound to be a vocation demanding respect and requiring lawful recognition. But, dear friends, cast a look around you and tell me, what is pharmacy in fact? Is it not regarded as a plain old business, or an old slot machine operated by any one who has gumption enough to start it?

I am certain that justice will be made manifest in the future, but let us make justice hurry just a little bit more! Let us join hands and uphold the standard of pharmacy. Let us see that every drug store has in it a registered and duly qualified pharmacist, and not merely his certificate, as now happens in many cases. Shall we stand by and see our chosen vocation trampled upon—abased by such unlawful and shameful acts? No! Let us see that our chosen vocation be protected as to her rights, her honor, and her standard of dignity!

Vinton, La.

J. J. DUBOURG, PH.G.

CONCERNING ETHEREAL OIL.

To the Editors:

An article giving complete information about ethereal oil would prove of interest. Until the food and drugs act of 1909 went into effect in Pennsylvania, when one ordered heavy oil of wine he paid about 50 cents for one ounce, and about half that amount for light oil. Now the Pennsylvania jobbers ask \$2.75 an ounce for heavy oil of wine, and \$2 for ethereal oil, U. S. P., which latter oil consists of heavy oil of wine 50 per cent and ether 50 per cent. At the same time most oil manufacturers sell a heavy oil of wine guaranteed under the national food and drugs act at \$5 a pound or 35 cents per ounce.

What is the difference between the heavy oil of wine which satisfies the Federal law and the much more expensive article spoken of at the beginning of this letter? Ethereal oil is described by the U. S.

Pharmacopœia as a volatile liquid containing equal volumes of heavy oil of wine and ether. The method of preparation is given, ending with a direction to add to the heavy oil produced an equal volume of ether. Why may not a druggist buy any heavy oil of wine that meets the requirements of the national act, and mix it with an equal volume of ether to obtain his ethereal oil?

The National Dispensatory states that the heavy oil contains 44 to 48 per cent of ester calculated as diethyl sulphate, and that we have no satisfactory knowledge of the other constituents.

I am informed that many druggists make Hoffmann's anodyne without any ethereal oil whatever, probably in deference to the taste of the foreigner who buys it for drinking purposes. From the amount of confusion and lack of knowledge concerning the oil on the part of druggists, doctors, and wholesale druggists, it seems to me that an article along the lines indicated would be of much interest. I know that it would to me. THOS. W. MURPHY.

Vandergrift, Penn.

THIS "LOVE POWDER" A REPEATER!

To the Editors:

I noticed a letter in the December issue of the BULLETIN from A. S. Parker asking for suggestions for a love-gaining remedy.

Let me tell my experience with a young man who was in search of a similar remedy. He was about 21 years old and appeared to me to be not quite right. When he asked for some "Love Powders" I said: "I have none prepared, but if you will give me a little time I'll fix up a box. Call in about fifteen minutes." I thereupon made a dozen powders consisting of one grain each of pepsin and sugar, with instructions to take one occasionally or as needed. The charge was 25 cents. The boy left feeling pleased, but returned in a few minutes inquiring whether a little liniment of some kind would not also be good. I sold him a 50-cent bottle of liniment.

I did not expect to see him again, but in about a year he appeared and wanted some more of those "Love Powders." I sold him another box of the same description.

If this prescription will be of any use to your readers they are welcome to it.

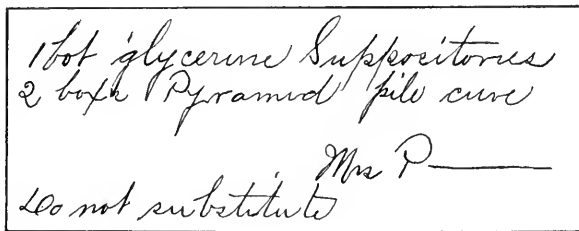
ALEX. H. FJELDSTAD, PHM.D.

Blooming Prairie, Minn.

THE SUBSTITUTING DRUGGIST AGAIN.

To the Editors:

We were much interested in the customer's order which you reproduced on page 519 of the December BULLETIN. It was an order for water of ammonia, and the customer was afraid that some awful kind of substitution would be practiced on him. An



1 bot glycerine Suppositories
 & box Pyramid pills cure
 Do not substitute Mrs P

order of a similar nature was received by us the other day, and I am sending it along to you for comparison with the other. It would seem that some of our kind friends have convinced at least a portion of the public that we druggists are a lot of substitutors.

ZIMMERMAN'S PHARMACY.

Lodi, California.

PINEAPPLE JUICE AS A VEHICLE FOR ESSENCE OF PEPSIN.

To the Editors:

In a recent issue of the *Bulletin of the A. Ph. A.*, in a report of the meeting of the Nashville branch of the A. Ph. A., mention was made of some results in the preparation of essence of pepsin. In all these experiments, wine of one kind or another was used. The writer recently made a small amount of the essence of pepsin, N. F., but used Dole's pineapple juice instead of wine.

The result was very fine, the product being just right in color and pleasant in odor and taste. Furthermore, it possessed the very decided advantage of a smaller content of alcohol. The one objection urged against pepsin preparations by physicians is the large content of alcohol, and the doctors say they use the essence or elixir of pepsin more as a vehicle than for its proteolytic effect. But if the preparation be made with pineapple juice, this objection is wiped out and the product possesses the additional value of whatever digestive power the juice itself may carry.

If any pharmacist chooses to try this experiment, the results will no doubt prove of interest to all readers of the BULLETIN.

H. P. PETTIGREW.

Sioux Falls, S. D.

THE NOMENCLATURE OF WOOD ALCOHOL.

To the Editors:

Referring to the communication from Henry P. Hynson, mentioned in the December BULLETIN in connection with the editorial, "Wood Alcohol by Another Name," let me say that the term he suggested, "Methyl Hydroxide," hardly strikes me as being all that could be desired as a new name for wood alcohol.

Would there not be danger of the term being confused by those not particularly versed in pharmaceutical nomenclature with the more universally used article Hydrogen Peroxide? "Hydroxide" and "Peroxide" to those unfamiliar with chemistry or scientific terms would have a very similar appearance in print and a certain similarity in pronunciation.

Why not call it "Wood Distillate?" No other article of common use has a title at all familiar. Neither would such a name be in any way incorrect.

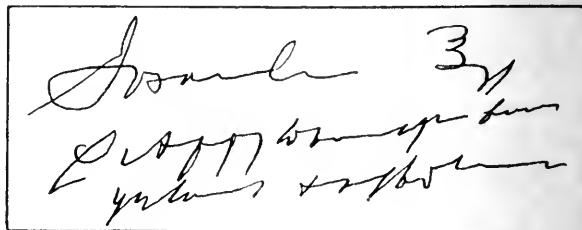
Storm Lake, Iowa.

WILBUR M. SUTTER.

A PUZZLE SOLVED.

To the Editors:

I have just noticed the cryptograph on page 519 of the December BULLETIN [reproduced herewith—



Formalin 36
 Apply to suspected sputum and otherwise

Ed.]. As a pharmaceutical cryptologist I do not consider this a very hard prescription to decipher:

R Formalin36

Sig.: Apply to suspected sputum and otherwise.

Yours for better penmanship among the learned medical profession—and it needs it sadly and badly as shown by this illustration!

Brooklyn, N. Y.

OTTO RAUBENHEIMER.

To the Editors:

I think the BULLETIN is the best that is published. Don't ever stop it, for I will pay for it.

Grenada, Miss.

J. W. HILL.

BUSINESS HINTS.

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Stimulating the Sale of a Skin Cream.—

Harrison's Pharmacy, Davenport, Iowa, employs a special circular to stimulate business on a skin cream. In every package that is handed out over the counter there is enclosed a slip 4 by 6 inches in dimensions. The text can be read in the accompanying reproduction. This practice is continued for a week only, but window displays of the cream are used concurrently.

The object of this whole scheme is not only to stimulate

10c and 15c will purchase one full 25c size of
FRENCH'S FRAGRANT FLORALINE,
 AT HARRISON'S PHARMACY, 312 BRADY ST.,
 DAVENPORT.

Name

Address

A Beautiful White Velvety Skin

So much admired and sought by
 all, may be obtained by the use of

French's Fragrant Floraline or Dermal Cream

Having stood the test of a quarter of a Century by the most exacting and critical public, and a confidence supported by the highest medical and scientific authorities.

IT HAS NO EQUAL

Its purifying and antiseptic qualities render the skin beautifully soft and pure, imparting a satin-like texture and Bloom of Youth—not obtained by any other preparation. If you would have a soft, velvety skin, free from blotches, pimples and roughness, avoid the many Glycerin Lotions and cheap impure Toilet Soaps, which are responsible for so many unsightly and disfigured complexions.

EXCLUSIVE DEPOT IN DAVENPORT AT
HARRISON'S PHARMACY, L. P. Carstens, Propr.
312 BRADY STREET

a demand for Floraline Cream, which pays the owners a profit of 15 cents, but also to secure the addresses of people who use the preparation. From time to time other advertising matter of a similar nature can be sent to the people whose names are on this list.

A South African Idea—Using a Maiden for Advertising Purposes!—

Elsewhere in this issue of the BULLETIN, on page 56, we are showing exterior and interior views of the pharmacy of W. Whyte, in Roodepoort, in the Transvaal, South Africa. In this place we reproduce another picture sent in to us by Mr. Whyte. Concerning it he writes as follows:

"This picture shows a girl who went to a fancy dress ball

here a fortnight ago representing our store. Her headdress is made up with three photographs of the store, while the dress is hung all over with nipples, puffs, tooth-brushes, and labels. Her fan advertises 'Dermaline,' a skin lotion, and two tiny cakes of that soap are fixed on also. Unfortunately no prizes were awarded, but there were quite a lot of compli-



mentary remarks passed by the onlookers, and it was a novelty for these parts."

Incidentally Mr. Whyte passes on to say some very nice things about the BULLETIN: "Your journal is always of interest to me, and I pass it along to others when I have digested its monthly contents. What an improvement it is on the other journals with their dreary reports of meetings, which only furnish reading for a few of the pharmacists who happen to live in the particular towns involved!"

The Personal Letter as a Business Getter.—

R. M. Nicholson, writing in the *Practical Druggist*, dwells on the value of direct correspondence as a means of winning customers. He argues:

"Suppose for instance you are introducing a new cigar. Now is there any quicker way to get that particular cigar to the attention of the men than to write them a short, snappy letter giving them a few good reasons why they should try the new smoke? The average smoker is an experimenter. He likes to try new smokes. Your direct message to him tells him what to try.

"Take another example. Suppose you carry a line of school or college banners. Why not send a letter to the high school and college students in your town inviting them to come to your store and look over your selection. They will read your letters and appreciate your interest. Not many such letters are sent them. They are neglected by most advertisers, and it is this same neglect on the part of your competitors that will make your letter all the more forcible."

CAPSULES OF SCIENCE.

Prepared by Prof. W. L. SCOVILLE.

Knobs of Knowledge.—

Ehrlich's "606" is found to be eliminated from the body more slowly than arsenic given in other forms.

Mr. Riehl finds that taka-diastase converts twice as much starch into sugar when in the presence of hydrochloric acid as the same amount of malt diastase.

M. Madelung says that a mixture of anesthetics is much more effective than an equal amount of one anesthetic.

Terpinolene, a by-product in the manufacture of terpineol, is being used as an adulterant of essential oils. In small quantities it is very difficult to detect.

If benzoic acid be exposed to sunlight in the presence of ferric salts, it is converted into salicylic acid, says Neuberg.

E. K. Nelson says that capsicum contains about 0.14 per cent of capsaicin, and that one drop of a solution of capsaicin 1 in 1,000,000 will produce a perceptible warmth on the tongue.

E. W. Schmidt says that thymol is no good as an antiseptic or disinfectant. He has tried it on various things, and finds it innocuous.

A non-inflammable substitute for celluloid, called "Boroide," has recently been put upon the market.

Dry pancreatin is not injured by heating to 100° C., but is partially destroyed by heating at 120° for two hours.

It takes about three years to entirely eliminate radium from the system after it has been administered.

Himdin (leech extract) is stated to increase the action of mercury and to render it toxic in smaller doses than normal.

M. H. Fischer says that glaucoma is due to a chemical change in the colloids of the eye, whereby the affinity for water is increased.

T. Heryng says that if milk be heated quickly to 80° C. and cooled immediately, as by spraying, it is sterilized without injuring its enzymes. Continued heat at this temperature destroys them.

In anesthesia by chloroform, about half the chloroform administered is decomposed by the blood and tissues, according to investigations by M. Nichloux.

Some Odds and Ends.—

The tungsten incandescent light has practically displaced the carbon light in France. They make a more durable lamp there, and guarantee it against breakage.

The simplest fat, glyceryl triformate, has only recently been obtained pure. It rarely occurs in nature.

Profuse perspiration causes a considerable loss of salt from the body, which must be restored in the food.

The toadstool contains the only glucoside known to have blood-agglutinating powers, and is the first agglutinin to be isolated by chemical means.

The starch of oats is better assimilated by diabetics than any other form of starch.

D. Jonnesco says that substances which combine chemically with adrenalin in test-tubes will not so combine in the living body.

Tahiti vanillas contain less vanillin but more oleoresin than do the higher grade Mexican or Bourbon vanillas.

Moth-millers, their larvæ, and certain beetles prefer strychnine in their food and thrive on it. Two German naturalists have recently demonstrated this.

Porcelain houses are being built in the tropics. They are water-tight, insect-proof, and sanitary—a combination impossible to get in wood in hot climates.

That's What They Say.—

Drs. Short and Salisbury believe that they "have obtained definite proof that none of the drugs at present in use in the form of liniments, lotions, ointments, etc., for painting on or rubbing into the skin have any power to relieve pain. The use of belladonna, opium, aconite, menthol, cocaine for bruises, thrombosis, inflammations, neuralgia, should therefore be discontinued."

Scented, or Take it with You.—

Scholtz & Gelaine say that the disinfecting property of soap is due to the soap itself, not to free alkali which it liberates. They also say that soap increases the antiseptic properties of perfumes, and a perfumed soap is therefore more bactericidal than the non-perfumed. Carbolic acid is, however, decreased in power in soaps.

A Costly Drunk.—

Wilde finds that the amount of alcohol in $\frac{1}{4}$ to $\frac{1}{2}$ pound of the best (and strongest) brandy drops is about equal to that in a pint of beer, while in the cheaper grades from 2 to 19 pounds would have to be eaten to get the alcoholic effect of a pint of beer.

Bleachers and Unbleachers.—

Two chemists of the Kansas Board of Health have been studying the digestibility of bleached flour, and fail to find any difference between the bleached and the unbleached in respect to digestibility. They made 188 tests before they decided.

Such Actions!—

A German chemist has studied the action of senna infusion by means of Roentgen-ray photographs. He finds no action until the senna reaches the large intestine, then peristalsis is increased and evacuation of the entire colon takes place.

How it Comes Out.—

The normal fat of the skin is oleic acid, which is found most abundantly in the horny layers and the cells surrounding the sweat pores. Neutral fats and cholesterol are found in only very small amounts in skin-fats.

BOOKS.

A "WORLD CORPORATION."

A book having the foregoing title came into the BULLETIN office for review some time ago, and we have until now been vainly waiting for a period of leisure in which to give it a proper degree of consideration. We find upon inspection that it outlines a scheme of great novelty for the financial and economic amelioration of society. The author is King C. Gillette, whose portrait and personality have become familiar at least to the readers of the Gillette Safety Razor advertisements in the magazines.

The "World Corporation" is, briefly put, an organization designed for the purpose of investing in all good securities. Its own stock will be sold at a dollar a share, and as fast as capital is thus secured it will be promptly invested in listed and staple stocks and bonds of the open market. These securities, taken out of the market, would be subject no longer to speculative fluctuations, and stability would therefore be obtained. Through this purchase of stock, too, one industry after another would be brought within the control of the World Corporation, and this great organization, when it finally reached its ultimate goal, would thus have absorbed and assimilated all corporations and become the master of the world's industry and commerce. A form of socialism would be reached in which the wealth of the world would be owned coöperatively, but without the common objection to socialism that everybody would share in equal measure. Dividends would be paid on the World Corporation stock quarterly, according to one's holdings, and these would be safe, sure and beyond fluctuation and manipulation.

It is a very pretty economic dream, and it remains to be seen how well it will work out. In the meantime the "World Corporation" has actually been incorporated in Arizona and offices have been opened at 6 Beacon Street, in Boston. Mr. Gillette is the first president and treasurer of the corporation. Realizing that some great and masterful personality is needed to head the movement Mr. Gillette offers to be one of 20 individuals who shall pay Theodore Roosevelt \$25,000 each for a period of service lasting four years. This would provide our ex-president with a million dollars, and on \$250,000 a year he ought to be able to live frugally. We cannot do justice in this brief review to the scheme as a whole, and we would refer those of our readers who are interested to the book itself. The publishers are the New England News Co., of Boston, and the book sells for \$1.00.

THE MICROSCOPICAL EXAMINATION OF FOODS AND DRUGS.

This valuable book is the work of Henry George Greenish, F.I.C., F.L.S., a prominent British pharmacist. It is specially devoted to practical instruction in the methods of examining vegetable foods, drugs, and their powders. The author has selected certain typical examples and describes the ways by which they may be examined.

The subject-matter is so arranged that the student may begin with an examination of the simple substances and

proceed to the most complex, acquiring as he goes along in the work a knowledge of the various tests and operations that are more or less in general use. The author has commenced with the starches, which require but little preparation. Thence he proceeds to the fruits, which commonly possess a complex structure, and to the roots, which are hard to identify when powdered.

One chapter is devoted to the more commonly recurring adulterants of foods and drugs. While it is often true that, as soon as a novel method of sophistication has been exposed, it is abandoned, nevertheless several adulterants appear to be in more or less constant use and the author therefore brings these to the notice of the students. Finally, Professor Greenish has appended a general scheme of examination which may prove useful in the investigation of an unknown powder.

The price of the book is \$3.00 net, bound in cloth. There are 386 pages. The book is published in this country by P. Blakiston's Son & Co., Philadelphia.

ANNUAL REPORT OF THE MISSOURI BOTANICAL GARDEN.

The twenty-first annual report of the Missouri Botanical Garden for 1910, Wm. Trelease, director, has been received. This volume does not differ in dress, etc., from the earlier volumes of the series which have been reviewed in this journal. It contains 195 pages of reading matter and 32 plates. The first twenty-four pages contain the annual reports of the officers and directors. The scientific papers which make up the rest of the volume are as follows: "The Algal flora of the Missouri Botanical Garden," by Ada Hayden; "Periodicity in *Spyrogyra*," by C. H. Danforth; "The Fungous Root Tubercles of *Ceanothus Americanus*, *Elæagnus Argentea*, and *Myrica Cerifera*," by E. G. Arzberger; "Development and Nutrition of the Embryo, Seed and Carpel in the Date, *Phoenix dactylifera*, Lin.," by Francis E. Lloyd; "Illustrated Studies in the Genus *Opuntia*—III," by David Griffiths; "Abnormalities in *Oenothera*," by R. R. Gates; "Botrytis as a Parasite upon *Chrysanthemums* and *Poinsettias*," by Perley Spaulding; "Fungi of Clay Mines," by Perley Spaulding.

Mr. Griffiths describes and illustrates ten new species of *Opuntia* as a result of five years' study of the material in both field and garden.

O. A. F.

A HANDBOOK OF COSMETICS.

A very interesting little work is a "Handbook of Cosmetics" by Dr. Max Joseph of Berlin. The work has been translated, and the English version may be obtained from E. B. Treat & Co., 241-243 W. 23d Street, New York. There is a demand among doctors and druggists for a fuller or more scientific knowledge of the skin and hair, and the treatment of their minor affections. Too much of the work goes to the chiropodist, the barber, and the quack electrician. There is room for the pharmacist in cosmetics because the doctor does not make a study of these apparently trivial affections. Dr. Joseph's little book should help to disseminate some valuable information on the subject. Aside from text of a general nature it has 151 recipes for the preparation of cosmetics for the skin, hair, mouth, and nails.

QUERIES.

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Repairing Broken Glass, Porcelain, and Bric-à-Brac.

P. D. Co. asks us for a formula for making cement for china, glass, etc. The following formulas have been recommended:

1. Broken glass, china, bric-à-brac, and picture frames, not to name casts, require each a different cement, in fact several different cements. Glass may be beautifully mended to look at, but seldom so as to be safely used. For clear glass the best cement is isinglass dissolved in gin. Put two ounces of isinglass in a clean wide-mouthed bottle, add half a pint of gin, and set the mixture in the sun until the solid is dissolved. Shake well every day, and before using strain through double lawn, squeezing very gently.

Spread a white cloth over the mending table and supply it with plenty of clean linen rags, strong rubber bands, and narrow white tape, also a basin of tepid water and a clean soft towel. Wash the broken glass very clean, especially along the break, but take care not to chip it further. Wet both broken edges well with the glue, using a camel's-hair pencil. Fit the break to a nicety, then slip on rubber bands lengthwise and crosswise, every way they will hold. If they will not hold true, as upon a stemmed thing, a vase, or jug or scent bottle, string half a dozen bands of the same size and strength upon a bit of tape, and tie the tape about neck or base before beginning the gluing. After the parts are joined slip another tape through the same bands and tie it above the fracture; thus with all their strength the bands pull the break together. The bands can be used thus on casts of china—in fact, to hold anything mendable. In glass mending the greater the pressure the better, if only it stops short of the breaking point. Properly made the isinglass cement is as clear as water. When the pieces fit true one on the other the break should be hardly visible, if the pressure has been great enough to force out the tiny bubbles, which otherwise refract the light and make the line of cleavage distressingly apparent. Mended glass may be used to hold dry things—as rose leaves, sachets, violet powder, even candies and fruits. But it will not bear to have any sort of liquid left standing in it, nor to be washed beyond a quick rinsing in tepid water. In wiping always use a very soft towel, and pat the vessel dry with due regard to its infirmities.

2. The most dependable cement for china is pure white lead, ground in linseed oil, so thick it will barely spread smoothly with a knife. Given time enough to harden (some three months), it makes a seam practically indestructible. The objection to it is that it always shows in a staring white line.

3. A better cement for china is white of egg and plaster. Sift the plaster three times and tie a generous pinch of it loosely in mosquito netting. Then beat the egg until it will stick to the plaster. Have the broken egg very clean, cover both with the beaten egg, dust well with the plaster, fit together at once, tie, using rubber bands if possible, wrap loosely in very soft tissue-paper, and bury head and ears in a sand box, taking care that the break lies so that the sand will hold it together. Leave in the box twenty-four hours. After a week the superfluous plaster may be gently scraped away.

To Polish Brass.

J. M. T.—Rub the metal with rottenstone and sweet oil, then rub off with a piece of cotton flannel, and polish with soft leather. A solution of oxalic acid rubbed over tarnished brass soon removes the tarnish, rendering the metal bright. The acid must be washed off with water, and the brass rubbed with whiting and soft leather. A mixture of muriatic acid and alum dissolved in water imparts a golden color to brass articles that are steeped in it for a few seconds.

A brass polish may be prepared by making a paste of equal parts of sulphur and chalk, with sufficient vinegar to

reduce it to the proper consistency; apply it to the metal while moist, allow it to dry on, and rub with a chamois skin. For ornaments or engraved work, clean with a brush.

Another process, and one that gives to the brass a very brilliant color, is to make a wash of alum boiled in strong lye, in the proportion of 1 ounce alum to 1 pint lye. Wash the brass with the mixture, and afterward rub with chamois and tripoli.

A weak solution of ammonia in water makes an excellent wash. Apply it with a rag, dry with a piece of chamois, and afterward rub with a piece of chamois and a very small quantity of jewelers' rouge.

Silvering Mirrors in Spots.

J. B. R. D. C.—Clean the bare portion of the glass by rubbing it gently with fine cotton, taking care to remove any trace of dust and grease. If this cleaning be not done very carefully, defects will appear around the place repaired. With the point of a penknife cut upon the back of another looking-glass around a portion of the silvering of the required form, but a little larger. Upon it place a small drop of mercury; a drop the size of a pin's head will be sufficient for a surface equal to the size of the nail. The mercury spreads immediately, penetrates the amalgam to where it was cut off with the knife, and the required piece may be now lifted and removed to the place to be repaired. This is the most difficult part of the operation. Then press lightly the renewed portion with cotton; it hardens almost immediately, and the glass presents the same appearance.

A Mentholated Jelly of Agar-Agar.

M. P. D. Co. asks us to publish a formula for mentholated jelly containing a base of agar-agar, one which will not be too thick, be slightly perfumed and have a pink color.

Agar-agar does not make a satisfactory base for such a jelly. It is nice when fresh, but grows watery and lumpy on standing. Glycerin in small proportion does not prevent this.

From ½ to ¾ ounce of agar-agar per pint is enough, and it should be boiled three to four hours. This will make a fairly stiff jelly, perhaps "too thick." The querist should have indicated what consistency he meant by the term "too thick." We suggest the following formula, but it is only a guess:

Agar-agar	3 drachms.
Water	12 ounces.

Boil three hours, keeping up the volume of water; then strain and add:

Glycerin	1 ounce.
Menthol	1 drachm.
Camphor	15 grains.
Cologne	3 ounces.
Liquid carmine.....	a sufficient quantity.

Dissolve the menthol and camphor in the cologne, add the glycerin, then the jelly, and mix well.

Anti-freezing Solution for Automobiles.

H.'s Drug Store.—You have come to the right place to ask about an anti-freezing mixture for use in automobile radiators during the cold months. It happens that we have personally been experimenting along this line, and our ex-

perience has been that nothing will take the place of an aqueous solution of wood alcohol or denatured alcohol. Glycerin, calcium carbide, and other substances are sometimes employed, but they have disadvantages, either producing deposits or exercising a solvent effect. As for the strength of the alcoholic solution, it can be varied to suit the temperature. A 33⅓-per-cent solution will do for all ordinary purposes and is said to resist the cold pretty nearly to zero. When, however, more of the solution is poured into the radiator to take the place of that which has evaporated, the solution ought to be at least 50 per cent in strength, since the alcohol evaporates faster than the water and the mixture in the radiator therefore has a tendency to become somewhat weaker in strength. Either denatured or wood alcohol can be used, but the former is slightly preferable because less volatile.

A Cathartic Mixture.

L. D. L. asks us to print the formula of a prune pepsin compound containing rhubarb, magnesium sulphate, aloin, spices, and a small quantity of syrup of prunes and pepsin. How would this do?

Syrup of rhubarb aromatic.....	4 ounces.
Magnesium sulphate	1 ounce.
Aloin	8 grains.
Syrup of prunes.....	4 ounces.
Glycerole of pepsin.....	2 ounces.
Elixir aromatic or simple syrup.....	enough to make 16 ounces.

There is an incompatibility between the pepsin and aromatic syrup of rhubarb, the latter being alkaline. Pepsin, however, is often exhibited in an alkaline medium notwithstanding this fact.

Syrup of Hemoglobin and Calcium Glycerophosphate.

E. J. N. wants a formula for syrup of hemoglobin and calcium glycerophosphate.

We suggest the following:

Hemoglobin	960 grains.
Calcium glycerophosphate	64 grains.
Phosphoric acid.....	75 minims.
Sugar	11 ounces.
Water, to make.....	1 pint.

Dissolve the calcium glycerophosphate in ¼ ounce of water, to which has been added the acid. Dissolve the hemoglobin in 6½ ounces of water, add the sugar, then the other solution, and shake until the sugar is dissolved. Make up to a pint with water.

Each tablespoonful represents 30 grains of hemoglobin and 2 grains of calcium glycerophosphate.

A Spaying Mixture for Hogs.

A. P. I. writes: "Can you give me the address of a manufacturer of a spaying mixture for hogs?"

For spaying (ovariotomy) or castration use a 1 or 2 per cent compound solution of cresol, U. S. P. It may be had from any pharmaceutical house. Of course, the fluid is applied externally only. Wash the parts with the antiseptic before and after the operation.

Obscuring Glass.

D. W. E. W.—As a temporary frosting for windows, mix together a strong, hot solution of Epsom salt and a clear solution of gum arabic; apply warm. Or use a strong solu-

tion of sodium sulphate, warm, and when cool wash with gum water.

For permanently obscuring glass use a mixture of lead and turpentine, making a fluid a little thinner than paint. Then take a pouch of cotton batting covered with one layer of cheese-cloth and daub the mixture on the glass. In a warm room it sets quickly; so apply the lead rapidly. This frosting produces a ground-glass effect and will not wash off. To scrape it off a paint and varnish remover must first be applied.

GENERAL ESSAYS.

LOST: ADAM AND EVE.

By HARRY B. MASON.

A passing statement made in one of these essays a month or more ago has struck fire among a friend or two and also among several correspondents personally unknown to me. This statement was to the effect that "few people believe any longer in Adam and Eve and their Garden of Eden." Soon afterwards, as it happened, the subject of evolution was debated at a dinner club of which I am a member, and altogether I have had a chance to see that "our first parents" do have quite a number of advocates after all.

Thirty or forty years ago, when Darwin published his "Origin of Species," and made those experiments and observations which revolutionized the world of thought, war was at once joined between the evolutionist and the theologian. If the world had been untold millions of years in the making instead of six thousand; if it had been nothing but a nebulous mass at the beginning; if it had assumed form and shape only after eons and eons of time; if all the different classes of plants and animals had gradually evolved from a few primal types, or perhaps ultimately from the "primordial mud" alone; if man had himself risen slowly and painfully from the lower forms of life and was merely a higher animal; if, in short, the story of "special" and sudden creation as set forth in Genesis was utterly at variance with both reason and fact, what became of the very foundation and abutments of our religion? If you rob the Bible of its infallibility and accuracy of statement, what is left of the historical and inspiratory basis of our faith? If you insist that God did not create the world and everything in it within six days, what credit is left to Him, what place does He fill in the universe, and where has our allegiance gone?

This was the argument of the theologians, and this is why they fought evolution, tooth and nail. As experiment after experiment and discovery after discovery compelled them to yield ground inch by inch, and forced them to recognize unwelcome truths concerning the age of the world, they adjusted themselves as well as they could to the changing situation and strove heroically to explain away the facts. They first decided that the six days of creation were long allegorical "periods" of time, and they passed on to devise other ingenious but sophistical hypotheses to confound and refute the evolutionists. "Science" and "Religion" were

at swords' points. They were at open and determined warfare, and it was felt that one or the other must fall.

This was the situation thirty or forty years ago, but happily neither science nor religion has fallen. Both have come out of the contest stronger than ever. Religion has finally yielded to Science, and Science has reciprocated by producing a firmer Religion. The two have become perfectly reconciled, and they now live together like brothers.

That the theologian should yield was inevitable, for there came a time when the facts could no longer be denied. The evidence was too overwhelming. The geologist proved by the stratified rock that for the most part the mountains had been laid down inch by inch at the bottom of oceans millions upon millions of years ago. The paleontologist found within these strata the remains of animals whose types had long been extinct, and from which our modern animals had descended through a myriad of evolutionary changes. The paleontologist also found prehistoric man embedded in the rocks back in the pliocene and even in the miocene ages—a type of man greatly inferior to the one familiar to us in history. The archeologist discovered indisputable records of an Egyptian civilization of a pretty high character at least seven thousand years before Christ and three thousand years before Adam and Eve were supposed to have been created the "first man" and the "first woman." The experimental botanist and the experimental biologist of Darwin's time and after saw plant and animal types change; they saw new species appear; they proved therefore the fallacy of the belief that "every living creature was created after its own kind," and they gave a powerful impetus to the evolutionary hypothesis and to the belief in the slow development of man from the lower animals. In the meantime the experimental psychologist proved that the mental characteristics of the higher animals, and sometimes of the lower animals also, were surprisingly similar to those of man himself, so that the ascent of one from the other represented a difference in degree but not necessarily in kind.

All of this evidence, and much more of an equally impressive and unanswerable character, could not be denied, and it no longer is denied by thinking men. But how has the theologian adapted himself to the situation and come out of it with a richer and deeper faith? He now sees that the doctrine of evolution implies a greater God than the doctrine of special creation. He realizes that God is himself identified with the natural laws which have caused, and which are still causing, the untold changes of time; that through these great laws God is ever working upward and onward in ways which are truly astonishing and marvelous; that higher and higher types are constantly being formed; that the world is steadily growing better and better; that God is working out a vast, complex, intricate spectacle far sublimer than that implied in a mechanical manufacture of a puppet world done in six days; and, richer and sweeter than all this, that God is in His world, that He is of His world, and that He is part and parcel of the whole grand scheme. The modern theology has thus brought the Creator much nearer and much closer to man than the old theology was able to do, and it has yielded a much more human and sympathetic God. In the language of Lyman Abbot, it has made every day a creative day.

As for the Bible, it is no longer looked upon, and need not be looked upon, as an infallibly accurate document. It chiefly comprises the history and the literature of the ancient Hebrews. But the ancient Hebrews, though a wonderful people, could not be expected to know as much about theology or any other science as we know several thousand years later, and it is not surprising that they fell into doctrinal errors. Their notions of the creation, the fall, and the deluge were the current notions of the time, and were borrowed bodily from the older religions of Egypt, Assyria, and Phœnicia. But these stories, as translated by the Hebrews, were often beautiful literature, and they taught human lessons which are as pertinent to-day as they were a thousand years or two before Christ. The command of God, and likewise the command of natural law (one and the same thing), that we must not yield to temptation, is set forth in Genesis with a strength and conviction which makes the book one of great power entirely regardless of what our notions may be about creation. This book, like much else in the Bible, is to be read as a beautiful fable, or a moral allegory, and not as literal fact.

Turning now to lighter phases of the subject, and leaving heavy seriousness behind, let it be said that some of the foregoing considerations were touched upon at the dinner debate mentioned in the first paragraph of this essay, and it there became apparent, as already intimated, that some very good people still reject evolution and cling to Adam and Eve as their distant progenitors. A few of them, with pride in their family tree, object to the anthropoid ape as either an ancestor or a cousin, apparently forgetting that the imitative characteristics of the monkey are still everywhere in evidence and that as soon as one woman purchases a peach-basket hat all womankind at once resembles a fruit market on a fashionable scale.

Still others believe that mind and soul are typical of man only, are not to be found in the lower animals, and that therefore man could not have developed from them but must have been "created after his own kind." One of the speakers at the dinner was a teaching psychologist who recited some interesting experiments he had been making for the last two or three years to show the comparative mental characteristics of the rat and the man. The same complex labyrinth had been used for a colony of rats and a group of university students. The students were told to reach a certain objective point by the shortest possible route: the rats were in effect made to do the same thing by putting food for them in the same location. The identical colony of rats was kept under close and careful observation for months; meanwhile the form of the labyrinth was changed from time to time; and the result was that the rats rapidly developed the power of reasoning, grew to eliminate their mistakes one by one, and learned the direct route almost as quickly as reasoning man himself.

The result of this experiment was cited to show the fundamental similarity in mind between man and even the lower animals, but possibly the speaker failed to attribute the mental power of the rat to its proper source. Is it not more probably due to the close contact with the feminine brain which the rat has enjoyed now for several years?

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THE MONTH'S HISTORY.

LIQUOR LEGISLATION.

The Michigan Retail Druggists' Association, a new society organized a couple of years ago in the western part of the State, but already having a large membership, is somewhat at loggerheads with the Anti-Saloon League over the question of liquor legislation. The present liquor law in this State restricts the sale of liquor in dry counties to physicians' prescriptions, and directs that such prescriptions may not be refilled. It also renders it necessary for druggists to report their sales monthly to the prosecuting attorney of the county.

The M. R. D. A. declares that this law has been flouted by a large number of physicians, who have conducted a thriving traffic in the sale of liquor

prescriptions at prices ranging from 10 to 25 cents apiece; that pharmacists who have dispensed such prescriptions in good faith have been unjustly prosecuted; that the courts have exempted the physicians from blame and have punished the druggists; and that in putting the word of physicians above that of pharmacists the State has done great injustice to a reputable class of men besides subjecting them to exceedingly unfair prosecution.

The M. R. D. A. has therefore drawn up a bill eliminating the physician from the problem, and providing that liquor may be sold only in dry counties to those consumers who sign affidavits that they are buying the substance for legitimate medicinal purposes. The bill would make every such druggist a notary public, and the purchaser swearing to the affidavit would therefore make it a legal document. Then, if the consumer was found to have lied, he would himself be subject to prosecution for perjury. It will be seen that this bill would take the responsibility from the physician and place it upon the purchaser himself. Some measure of responsibility, however, would also attach to the druggist, and it is provided that he must not sell liquor to certain "posted" persons, or to any one in excess of a certain quantity every twenty-four hours.

The Anti-Saloon League is not willing to give its approval to this measure, but has had introduced into the State legislature, now in session, an amendment to the existing law seeking to overcome some of the objections of the pharmacists. Thus, the person who buys alcohol for scientific purposes, or wine for sacramental purposes, will be considered guilty of perjury if he falsifies in the affidavit which he is compelled to make out before he can buy these substances. Thus also a new provision is added plainly subjecting physicians to the penalties of the act if they prescribe liquor illegitimately and not for the proper treatment of patients under their care.

Whether these concessions will satisfy the M. R.

D. A., or whether it will insist upon the introduction of its own measure, we are not able to say at this writing. Last month a conference was held by the legislative committees of the M. R. D. A. and the Michigan State Pharmaceutical Association, the object being to discuss both measures and to decide what attitude would be taken by the retail drug trade of the State. The subject is one of great importance, and it is realized that if pharmacists go too far in opposing the Anti-Saloon League a good deal of undesirable and hurtful newspaper publicity may result.

* * *

**UNITED DRUG
COMPANY
REORGANIZED.**

The latest Napoleon in the drug business is Louis K. Liggett, of Boston, who seems to be mounting upwards in an aeroplane. The most sensational piece of news last month was the reorganization of the United Drug Co. and its incorporation under the laws of Massachusetts at a capitalization of \$5,000,000. Under the new charter the several auxiliary corporations which Mr. Liggett has organized from time to time will all be brought under the tent. This includes the Liggett chain of 35 or 40 drug stores through the eastern and middle western States, the most recent additions to which are two stores purchased from the Columbus Pharmacy Co., of Columbus, Ohio.

The absorption of the Louis K. Liggett Co. into the United Drug Co. may in part have resulted from the litigation instituted during the last year by John B. Cobb. At any rate, a feature of the new arrangement is that Mr. Cobb withdraws his suit, and the dove of peace has apparently poised itself over the differences between Mr. Liggett and the Riker interests represented by Mr. Cobb. Mr. Liggett receives \$100,000 of common stock in the new company by turning over to it his interest in the Louis K. Liggett chain of stores.

The new United Drug Co. will have 50,000 shares of preferred stock at a par value of \$50 each, and 25,000 shares of common stock at a par value of \$100. The reorganization of the company is declared to have been caused by a desire to bring all of the Liggett group of enterprises together, to avoid duplication of expense, and to secure money for the further development of the business. The preferred stock will pay dividends of 7 per cent, but the common stock is expected to do much better than that.

In the meantime we observe that the Washington

Coöperative Drug Co., which was apparently a local buying club organized under the ægis of the A. D. S., like others throughout the country, has thrown up its hands, has declared the enterprise a failure, and is going out of business as fast as the receivers can close up the accounts.

* * *

**ANTI-NARCOTIC
MATTERS.**

There is nothing particularly new to report concerning the Foster anti-narcotic revenue bill in Congress. Before this number of the BULLETIN reaches its readers Congress will have adjourned, and it cannot be foretold at this writing whether or not the bill will become a law. Such an outcome is doubtful because of the important business before Congress at this short session, and particularly in view of the time needed for the discussion of such vital questions as Canadian reciprocity and the direct election of United States senators. If the bill is passed, however, it will doubtless be modified in several respects so as to be less burdensome on all branches of the drug trade. The bonding of retailers may be cut out, and there is some talk that even the revenue feature may be eliminated.

In the meantime we observe that the Dominion parliament in Canada is getting after the narcotic traffic energetically. In 1908 a law was enacted which has had the result of suppressing the manufacture of smoking opium. Importation has continued, however, and a new bill has been devised which subjects every person to a \$500 fine who imports, manufactures, sells, or has in his possession opium, morphine, or cocaine for other than scientific or medicinal purposes. It seems that in Montreal alone 125 arrests of persons for the sale or use of cocaine have been made during the last six months by the city police.

* * *

**PROPAGANDA
WORK.**

It would seem from a report in the *P. A. R. D. Bulletin* that the Philadelphia Association of Retail Druggists has had a banner year in the propaganda work. Within a week or two not long since there were, for instance, no fewer than five get-together meetings in five different districts throughout the city. These meetings were financed in part by the parent organization, which contributed \$75 to each of them, and in part by the district members, who made up the balance of the money required. Franklin M. Apple, chairman of the Ethical

cal Preparations Committee of the P. A. R. D., is entitled to much of the credit for such excellent work. A detailed report of all five meetings was printed in a recent issue of the *P. A. R. D. Bulletin*, and altogether it would seem that the Philadelphia druggists have taken hold of the problem with their characteristic energy and success.

Perhaps the most interesting propaganda meeting held during recent months was that tendered by the Ohio Valley Druggists' Association to the physicians of Cincinnati. This was made notable by the men who were secured to deliver the addresses. John Uri Lloyd served as toastmaster, and the opening talk was given by Mayor Schwab, Ph.G., M.D. Secretary Potts of Chicago, Prof. James H. Beal of Scio, and Dr. W. C. Anderson of Brooklyn, all came from considerable distances to have a part in the programme, while two or three of the most distinguished physicians of Cincinnati represented the medical profession on the toast list.

* * *

SUNDAY CLOSING. The California Drug Clerks' Association has recently achieved quite a triumph. Inaugurating a movement for Sunday closing in San Francisco, it has finally persuaded all of the proprietors to lock up their stores between the hours of 1 and 5 o'clock Sunday afternoon. In Los Angeles the druggists' organization has attacked the problem and apparently solved it in a satisfactory manner. The city has been divided into districts, and in each district hereafter one store will remain open on Sunday for prescription work. The druggists will take turns, and notices will be posted on the doors of the closed establishments directing customers where they can get their drug supplies.

* * *

THE LATE WM. C. MCPIKE. One of the fine old men in the jobbing trade passed away recently in the death of William C. McPike, president of the McPike Drug Co., of Kansas City, Mo. He was 74 years old. Entering the retail drug business in 1853, and the wholesale business in 1856, Mr. McPike had been engaged in the drug trade continuously until his death except for two years spent at the Philadelphia College of Pharmacy in order to equip himself more thoroughly for his calling. He was graduated from the P. C. P. in the same class with Prof. L. E. Sayre. The McPike Drug Co. was established in Alton,

Kansas; as it grew it was moved to Atchison, Kansas; and as its growth still continued it became necessary in 1904 to go to Kansas City, Mo. Judge W. C. Bland, a son-in-law of Mr. McPike, and the vice-president of the company, will doubtless succeed to the presidency.

* * *

PHARMACEUTICAL ATHLETICS.

We gather from a recent illustrated article in one of the Philadelphia newspapers that the Philadelphia College of Pharmacy is making a great feature of its gymnasium. Pictures are given of both the Director of Physical Education and the Instructor of Gymnastics at the college, and views are presented of the boys at their various exercises. A group cut of the basketball team is particularly interesting. The gymnasium is located on the fourth floor of the college building, and the students have apparently taken to it like ducks to water. It will be recalled that the P. C. P. football team (or was it the baseball nine?) played a brilliant game last year with the New York College of Pharmacy. We are evidently entering upon days of pharmaceutical athletics.

* * *

P. A. R. D. BACK IN THE FOLD. There is great rejoicing in the camp, for the Philadelphia Association of Retail Druggists has come back as a part of the N. A. R. D. forces. This happy result has been foreseen for several months, but before it could be realized sore spots had to be healed over, and apologies made for unkind things said in the heat of temper. But finally the brothers have patched up their differences—or have agreed that there really were no differences in fact, and everybody is happy. The chief peacemakers were President H. B. Guilford and Executive Committeeman Henry W. Merritt. The sun now shines resplendent in the heavens.

* * *

J. WINCHELL FORBES.

The death of J. Winchell Forbes occurred just too late for us to mention in the *BULLETIN* last month. Mr. Forbes was one of the unique characters in American pharmacy. He had had a varied experience as retail druggist, professor in the California College of Pharmacy, originator of a diastase product twenty or thirty years ago, employee of a Cincinnati jobbing house, and editor of

the company's house organ. During the last two or three years his health had failed him, and from his home in a small town in Ohio he had contributed monthly to the *Midland Druggist* a series of interesting, trenchant, original comments on current developments in pharmacy. Optimistic even in the discouragements of his later years, always buoyant despite the infirmities of age, he certainly presented a spectacle of courage which it would be hard to surpass.

* * *

NATIONAL MEETING OF THE CLERKS.

Elsewhere in the present issue of the BULLETIN we are showing portraits of the nine officers of the National Association of Pharmacologists—the organization of drug clerks which has been formed in the city of Columbus, Ohio, during the last year or so. We are informed that the first annual convention of this association will be held in Columbus on June 20. It is thought that a one day's session will be sufficient for the transaction of business in view of the fact that the organization is still young, and that the district, State, and county committees are as yet incomplete. The N. A. P. is a delegate body, and the work is to be accomplished through these local committees appointed or elected in each section.

* * *

THE POSTAGE- STAMP EVIL.

It would seem that stamp-vending machines are gradually gaining in favor among druggists. The BULLETIN has within recent months published several enthusiastic letters from its readers, and we are giving space to another this month. In Chicago the pharmacists of the Hyde Park section were to hold a meeting last month for the purpose of inspecting the different makes of vending machines, selecting some one of them, and then making a group purchase. The postage-stamp nuisance is bitterly resented by a good many druggists, and it would seem that stamp-vending machines offer a very convenient solution of the problem.

* * *

Thomas V. Wooten, the well-known ex-secretary of the N. A. R. D., has connected himself with the United Drug Co. and will undertake the work of organizing the "Rexallites" of the United States and Canada into State and provincial clubs. The initial meeting of the new Michigan club we are reporting upon elsewhere in this issue of the BULLETIN.

The much discussed anti-narcotic ordinance in New York City has finally been so amended as to exempt preparations of "the latest Dispensatory or National Formulary," in each dose of which there is not to exceed one-half grain of powdered opium or its equivalent of the alkaloids. External preparations are also exempted, but they must be marked "poison."

* * *

We erred last month in reporting that Prof. W. F. Clark, of Chicago, had been elected to succeed Professor Hallberg as chairman of the Pharmacopœial Sub-committee on Miscellaneous Galenicals. Professor Clark succeeded Professor Hallberg to membership on the general committee, but not to the chairmanship of the sub-committee.

* * *

Clarence O. Bigelow, the well-known druggist in New York City, has recently been elected to the presidency of the West Side Savings Bank, located at the corner of Sixth Avenue and Ninth Street. Mr. Bigelow has been a trustee of the institution for upwards of twenty years.

* * *

The Pennsylvania Board of Pharmacy has caused the arrest in Pittsburg of 18 druggists and several clerks for the unlawful sale of cocaine, morphine, and other narcotics. This "raid" followed three months of quiet work done by one of the agents of the Board.

* * *

Jacob Diner, formerly active in N. A. R. D. circles, has been compelled to retire from business as a retail pharmacist and has made a settlement with his creditors. It is reported that his failure was due to local competition from the Riker-Hegeman Co.

* * *

One of our "esteemed" contemporaries, in making capital of the death of Professor Hallberg by connecting a subscription offer with contributions to the Hallberg fund, has shown itself possessed of ahead-of-date shrewdness of a quite remarkable sort.

* * *

W. W. Bartlett, pharmacist, chemist, and lawyer, of Boston, and a man prominent in the pharmaceutical affairs of Massachusetts, died recently at the age of 64.

EDITORIAL.

THE ADVANCE OF SPECIFIC THERAPY.

Probably no movement in modern medicine is of more interest to pharmacists than the specific treatment of infectious processes. Discoveries in this field have followed one another thick and fast. Hardly more than a year or two ago Bacterial Vaccines were introduced. To-day their use in suppurating affections is quite general. Sodium cacodylate has been known for years; but it was only a short time ago that its value in the treatment of syphilis became apparent. This disease, for centuries the scourge of civilization, has at last bowed to the mighty power of science. Ehrlich's "606" is now in the market, and promises to accomplish wonders in the cure of the ravaging plague.

Certainly these are great days in medicine. We read a lot about organotropy and parasitotropy, the former referring to the destructive action of substances upon the body tissues, the latter to the power of drugs to kill infecting organisms without harming the human system. You catch the idea? We are looking forward to a great specific therapy, *magna therapia specificans*, that will give us a definite cure for each germ infection. We have learned that it is possible to inject into the blood stream products which will destroy certain organisms there present without attacking the tissues. What we want is more of these chemicals which will unite with, alter and destroy germ cells, but leave the human body unharmed. The products are there to be found if we only have the brains to find them. Ehrlich's great discovery is itself enough to show that all things are possible to him who will but think and work.

The development of specific therapy must go down in medical history as one of the achievements of the century. Tuberculin, we already know, picks out the tubercular spot and confines itself to the one focus. Sodium cacodylate and "606" act only upon certain kinds of diseased tissue. Bacterial vaccines, now in their infancy, are but a step in the progress toward the specific therapy of infectious processes. All this is extremely encouraging to the pharmacist for it calls a halt to drugless therapy and bids the therapeutic nihilist hold his peace. It should

help to increase fourfold the people's confidence in drugs and medicines.

The near future may witness further progress in the field of specific therapy. A chemo-pharmacology is developing with an encouraging rapidity. Men are attempting to set pharmacology on a chemical basis—to explain the therapeutic power of drugs by their chemical reactions. A striking achievement in this field is seen in "606," already referred to. The chemical composition is evident from its proper name, Dioxydiamidoarsenobenzol. While experimenting with substitution products of atoxyl (sodium paramidophenylarsenic acid) it was found that the transposition of the amido radical to the third position of the benzene nucleus caused a remarkable change. It reduced the organotropic properties of the drug without lessening its parasitotropic power. It was found, too, that the five-valent arsenic such as is present in atoxyl is far less able to destroy the syphilis organism than is trivalent arsenic, such as we have in Ehrlich's "606." The process of destroying the parasite is evidently a chemical reaction involving a process of reduction. Certainly this whole work of Ehrlich and his associates remains a wonderfully interesting bit of chemo-therapy.

Now what does all this mean to the pharmacist? It signifies that he must be better trained than ever in organic chemistry if he expects to be an up-to-date dispenser. A laboratory course in organic syntheses, a fair acquaintance with benzene derivatives and aniline compounds, and even a rudimentary knowledge of bacteriology are becoming indispensable to the apothecary who would be a master of pharmacy in its latest developments. Hitherto when a new organic chemical was introduced, the pharmacist could dismiss it with the thought: "Well, I get a call for that perhaps once a month, and when I do it is no trick to make a capsule, powder or solution of the drug. Why should I concern myself with its composition?"

But things have changed. If the use of the Ehrlich remedy, for instance, becomes general, a man may be called upon any time to dispense it—a chemical task that demands more than a rudimentary training in chemistry and a superficial knowledge of the chemicals to be dispensed.

If chemo-therapy develops greatly we shall doubtless in time see specialists among pharmacists as we do among physicians. In the larger cities

or towns there will perhaps be men schooled in organic chemistry and quantitative analysis who devote themselves largely to the dispensing of organic solutions for hypodermic injection.

A NET PROFIT OF 17.5 PER CENT!

A druggist in a country town in Illinois has submitted to us a statement of his business for 1910 with the request that we comment upon it. The main facts in the statement are the following:

Sales	\$13,629 54
Cost of goods sold.....	8,928 10
Gross profits	4,701 44
Expenses:	
Salary	\$1,000 00
Clerk's salary	570 50
Light	80 00
Rent	300 00
Other expenses	346 13
Total	2,296 63
Net Profits	2,404 81
Depreciation in stock and fixtures,	
5 per cent.....	205 00
Inventory	4,120 32

On the face of this showing the proprietor seems to be making pretty good money. His net profits were \$2404.81. Subtracting from this amount \$205 for depreciation, we have actual net profits of \$2199.81. Adding to this in turn \$1000 for the proprietor's salary, we find that his total income from the business was \$3199.81—practically \$3200 from a business of \$13,000 or more.

Dividing the gross profits by the sales, we find that the percentage of profit was 34.5—a fair average. Dividing in similar manner the expenses by the sales we find that the percentage expense was 17. This is unusually low and we suspect that, as often happens, the proprietor neglected to charge up to the expense account a number of things that properly belonged there. It would seem quite surprising, too, that a business of this size could be transacted entirely by two people—the proprietor and one clerk, without even the assistance of a boy. Evidently the owner and his assistant stuck pretty closely to their knitting! Assuming therefore that by economy the expenses actually were kept down to 17 per cent of the sales, and subtracting this figure from the percentage of gross profit amounting to 34.5, we find a percentage of net profit of 17.5—certainly an unusual figure. The item of rent

is very low, and this would assist also in keeping down the expense rate.

The inventory value of stock and fixtures is \$4120.32. This means that the investment was turned over more than three times during 1910, and this of course is excellent. Other things being equal, the faster one can keep his money moving the better off he is.

THIS ISSUE OF THE BULLETIN OF PHARMACY.

There are several unique features of this number of the BULLETIN that we should like to call particularly to the attention of our readers:

1. The two pages of druggists' residences are especially interesting to us, and we hope they will be to others. Incidentally these pictures will show that pharmacists are quite as prosperous and quite as keen home-lovers as any other class in the community, despite the prevailing conception that they have no time for their families. We have a good deal of pleasure in exploding this time-honored notion.

2. In addition to these two pages of druggists' homes the Illustrated Section contains four other pages. The nine clerks comprising the officers of the National Association of Pharmacologists; the nine portraits of well-known secretaries of the State pharmaceutical associations; the full-page picture of Charles Rehfuß, of Philadelphia, showing him at work at his desk; and the excellent cartoon of H. B. Guilford, president of the N. A. R. D.—we believe these features will all commend themselves heartily to our family of readers.

3. Besides the cartoon of President Guilford, there is a very readable sketch showing how Mr. Guilford has evolved from an ambitious drug clerk without money, to the possession of two large and prosperous establishments in the city of Rochester, N. Y., with a third about to be opened.

4. "My best paying side-line" is a theme discussed in the most practical, money-making style by nine experienced and successful druggists. It may or may not be significant, but we observe that four of these nine men have found photographic supplies to yield the best returns of all of their side-lines. Two other contributors give the first place to cigars, and one each to post-cards, stock foods, and canary birds and goldfish. In addition to this, one of the four men who make photographic supplies their leading line, speaks with equal enthu-

siasm of confectionery. Are these, then, the most profitable side-lines? We should be glad to hear from others what their experience has been—and what their sales-promoting methods are.

5. We think also that special attention is deserving to the contribution of H. B. Molyneaux on "The Manufacture of Greaseless Cold Creams." Mr. Molyneaux has experimented widely with these products, and he gives several formulas which have been the fruit of his experience.

6. Our department of "Letters" this month is fine—just what we are anxious to make it! It contains a variety of short, terse, practical, meaty communications of live interest to druggists generally. Let us hear from *you* with letters of this character.

We might also speak of two prize offers mentioned this month, of the continuance of our much-valued department of "Board Questions Answered," and of the wealth of practical and interesting material of one kind and another which we have sought to crowd into every page and corner of the journal—but we have already chatted long enough.

Anyway, we have tried hard to turn out a pretty good issue this month. How do you like it?

MORE LAY ADVICE.

The lay magazines seem of late to run to medical and pharmaceutical topics. Without attempting to explain this strange predilection of theirs for things that we have always felt are peculiarly our own, we can't refrain from poking a little fun at some of the things published. The latest is talc and vaselin as a hair dressing. This combination was suggested in *Harper's Bazar* as a new method of treating women's hair. The writer prefaces her suggestion with the hope that it may help other girls.

"After washing my hair," she writes, "it always used to be unmanageable for a whole week—soft and limp so that combs and hairpins simply wouldn't stay in it. Now I have no trouble at all. I wash my hair at night, and after drying it rub vaselin on the scalp before going to bed. In the morning I sprinkle it freely with talcum powder, which takes the grease from the hair, and then brush the powder out. This gives the hair enough body, as it were, to make it perfectly manageable, and doesn't make life a burden, as it generally is to a girl for several days after washing her hair."

Druggists may now make P. M.'s of their hair

tonics. They are to be replaced by the ingenious formula of our lay friend. But perhaps we should touch only lightly on this bit of pharmaceutical erudition because it was contributed to the Girls' Exchange of *Harper's Bazar*. Here a child is in her own province, and if the formula savors of infantile intelligence, some allowance must be made for the tender age of the contributor. When she matures, however, it is to be hoped that she will be able to obtain from the pharmacist better preparations for the hair than vaselin followed by talc.

"Give the hair body." We should think it would! Add a little dust from the street and we can see how a head of hair treated with the mixture would take on a fairly firm consistency. But why not try plaster of Paris at the start and be done with it?

\$2.50 FOR EVERY ACCEPTED ARTICLE.

Here you are—a brand-new prize offer.

"Best Advertising Schemes" have been so successful with the BULLETIN that we are going to start a department of "Best Soda Schemes."

\$2.50 for every accepted article!

Tell what method for increasing the sale of your soda has proved most successful—how you followed it—what the results were. Get right down to brass tacks and give the details.

If advertisements of any kind figured in the plan, send us specimens of these for reproduction.

Or if you have *anything* novel to say about the way you have conducted your soda fountain—send it along.

That's it—*anything* good about the soda business—anything that will help the other fellow.

\$2.50 FOR EVERY ACCEPTED ARTICLE!

WE STILL HAVE THAT \$20.00!

Our prize soda formula contest seems to be dragging. We've had some contributions, but we ought to have a lot more.

We are really tired of holding this twenty dollars—it's getting heavy.

Come along, now—submit your crack soda formulas.

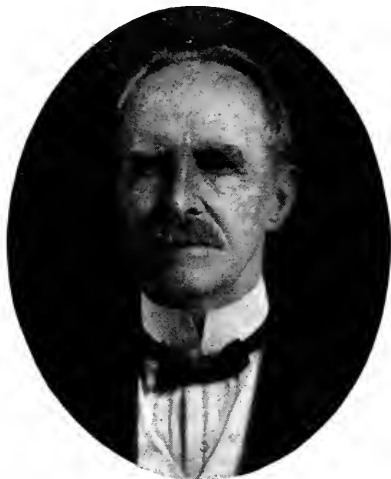
Ten dollars for the best one, and five dollars each for the two next best.

Contest closes soon, and the prize-winning formulas will be printed next month.

THE HALL OF FAME.

A VETERAN IN THE SERVICE.

Anybody who has ever met Dr. J. B. Bond, Sr., of Little Rock, Ark., has been attracted by his virile and cheerful personality. When the Doctor sent us the portrait some time ago at our request he remarked with characteristic vigor: "I didn't kill the barber who trimmed my



DR. J. B. BOND, SR.

mustache in a *straight line* the day I sat for this picture, but now I wish I had!" Those who have attended during recent years the annual meetings of the National Association of Boards of Pharmacy will particularly smile at this quotation and will recall the straight-from-the-shoulder manner in which Dr. Bond has expressed himself at these gatherings. At the same time, however, everybody knows that underneath this gruff exterior is a heart throbbing with kindness and courtesy.

Dr. Bond was born in 1836 and is therefore in his 75th year—still very much in the ring! He served four years in the Confederate army, attained the rank of Division Surgeon in Price's division, and remained on duty until he was compelled to surrender at Little Rock in May, 1865. He practiced medicine until 1872, then entered the retail drug business, to stay in it until his retirement in 1908. In 1895 he was appointed a member of the Board of Pharmacy, the next year was elected president of the board, still holds that office, and his present commission does not terminate until 1915. Dr. Bond was author of the State pharmacy

law of 1891. He was also one of the promoters of the State Association of Pharmacists organized in 1883, and was president of the society from 1884 to 1887.

Now, in his 75th year, he needs no spectacles, and he is a true gentleman of the South, suh!

THE DEATH OF LEO ELIEL.

Leo Eliel of South Bend, Indiana, died suddenly in his store early last month. This removes one of the few remaining pharmacists of the old school. Mr. Eliel was a product of the German apprenticeship system. He came from Prussia with his parents when he was 15 years old, and shortly afterwards was indentured to a German pharmacist in Indiana who had himself been in this country only a few years. The training was very severe and very thorough. It developed habits of experimentation and study which were never abandoned, and throughout his whole career Mr. Eliel was a practical pharmacist of unusual skill.

Such a man, cherishing the ideals of his profession, would very naturally connect himself with the American Pharmaceutical Association. Mr. Eliel was long a member of the organization, filled



LEO ELIEL.

many offices within its gift, and was finally elected to the presidency several years ago. Just about that time he sold out his interest in the drug store in South Bend with which he had long been connected, and some time afterwards opened what he hoped

to make a purely ethical and prescription pharmacy. In this, however, he was somewhat disappointed, and it was considerable of a shock to his ideals to find that there was barely enough public support for such establishments except in the larger cities.

A brother, J. C. Eliel, one of the most brilliant men which the jobbing trade of the country has yet produced, died some years ago in Minneapolis. The two men were quite unlike each other. One was an aggressive business man of great adaptability. The other was a modest, retiring scholar who had more or less difficulty in transmuting his ideals into practical results.

MAKING MONEY IN THE DRUG BUSINESS.

These are evidently the days to pile up a reasonable amount of money in the practice of pharmacy—that is, if you know how to turn the trick. There is Thomas Voegeli, for instance—the man in Minne-



THOMAS VOEGELI.

apolis whom everybody in N. A. R. D. and Rexall circles knows all about. Some months ago we told how Mr. Voegeli had purchased a building lot at a cost of \$18,750 and was going to erect a \$16,000 residence on it. Now we find that more recently the firm of Voegeli Bros. has opened its third store in Minneapolis—a branch in the West Hotel.

It is reported that the investment in this new property represents about \$40,000, that from 10,000 to 12,000 people visited the store on opening day, that the sales on that day approximated \$1200, and that the business since then has been very gratifying

in volume. The Voegeli gospel was enunciated in these pages some months ago when Mr. Voegeli declared in a letter that the thing for druggists to do was not to worry about chain-store domination or any other form of competition, but to get busy and build up the very best service they knew how—to attend to their own knitting and do a thorough job at it!

APPOINTED TO AN \$8000 OFFICE.

The roster of druggists who are successful in politics continues to enlarge. One of the recent instances brought to our attention is that of G. Edward Schulz, a pharmacist in Milwaukee. Mr.



G. EDWARD SCHULZ.

Schulz has just been appointed by President Taft to the office of Collector of Customs for the District of which Milwaukee is the center, and the appointment has been confirmed by the senate. Mr. Schulz was recommended for the office by Senator La Follette, and it might be said that Mr. Schulz has been active in the insurgent Republican movement for several years and has been an ardent supporter of the Senator. He is treasurer among other things of the Republican State Committee of Wisconsin. The collectorship of customs in Milwaukee means an income of about \$8000 a year, which is equivalent to the salary of a United States senator, and the mere fact that Mr. Schulz would be recommended for such an office indicates beyond doubt that he occupies a commanding position among the progressive Republicans of Wisconsin.



E. F. Heffner, secretary Pennsylvania Pharmaceutical Association, 13 West Water Street, Lock Haven, Pa.



Robert M. Dadd, 182 18th Street, Milwaukee, Wis.—the house in the center of the picture is Mr. Dadd's.



John C. Wallace, ex-president of the Pennsylvania Pharmaceutical Association, Mercer St. and Wallace Ave., New Castle, Pa.



C. S. Ashbrook, president Ohio Pharmaceutical Association, Mansfield, Ohio—the first house at the right.



Dr. Edward Kremers, dean of the School of Pharmacy of the University of Wisconsin, in the suburbs of Madison.



Wilhelm Bodemann, the irrepressible critic of all things pharmaceutical, Hyde Park, Chicago.

Homes of well-known druggists.



The house at the right is that of Major Ed. J. Rodgers, secretary of the Michigan Board of Pharmacy, 1217 Pine Grove Avenue, Port Huron, Mich.



This is a view of Pine Grove Park, Port Huron, Mich., which is right across the street from the residence of E. J. Rodgers shown in the opposite column.



John G. Godding, president of the American Pharmaceutical Association, Boston, Mass.



This shows a corner of the living room in the Godding camp up in Maine among the Rangeley Lakes.



Charles H. McConnell, proprietor of the Economical Drug Store on State Street, Chicago, has this home at 4417 Ellis Avenue.



This shows the living room in Mr. McConnell's residence, beautifully decorated and furnished after the Empire style.

Homes of well-known druggists.



L. W. Sinclair, Columbus, Ohio,
president.



Chas. H. Bowersox, Columbus, Ohio,
first vice-president.



John A. Coram, Columbus, Ohio,
second vice-president.



John C. Mandabach, Columbus, Ohio,
national organizer.



P. A. Mandabach, Columbus, Ohio,
secretary-treasurer.



Gage Y. Kelly, Bluefield, W. Va.,
national committeeman.



Arthur T. Thrall, Columbus, O., member of the
Auditing Committee.



D. N. Robin, Freedom, Pa., member of the Auditing
Committee.



Frank M. Blank, Akron, O., member of the
Auditing Committee.

A Page of Prominent Drug Clerks—Officers of the New National Association of Pharmacologists, Columbus, Ohio.



W. S. Parker, Lisbon, secretary North Dakota Association.



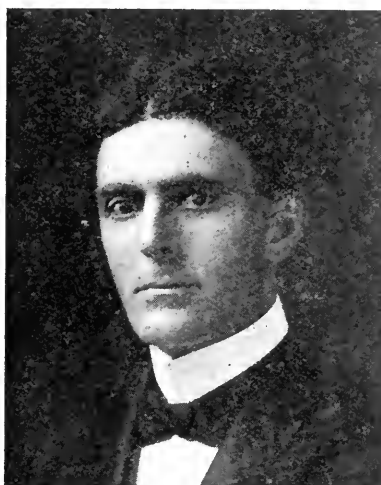
E. B. Heimstreet, Palmyra, secretary Wisconsin Association.



Frank C. Stulzen, Elizabeth, secretary New Jersey Association.



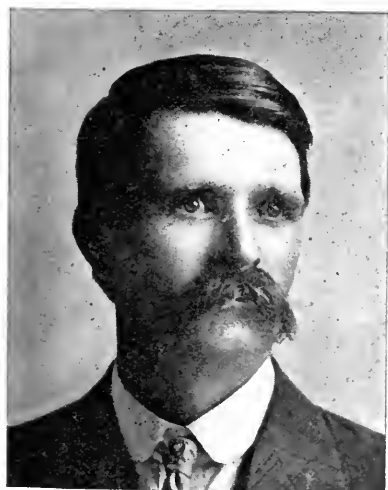
S. S. Ferguson, Pocatello, secretary Oregon Pharmaceutical Association.



Maurice P. Schwartz, Indianapolis, secretary Indiana Association.



Edgar F. Heffner, Lock Haven, secretary Pennsylvania Association.



J. G. McBride, Stella, secretary Nebraska State Association.

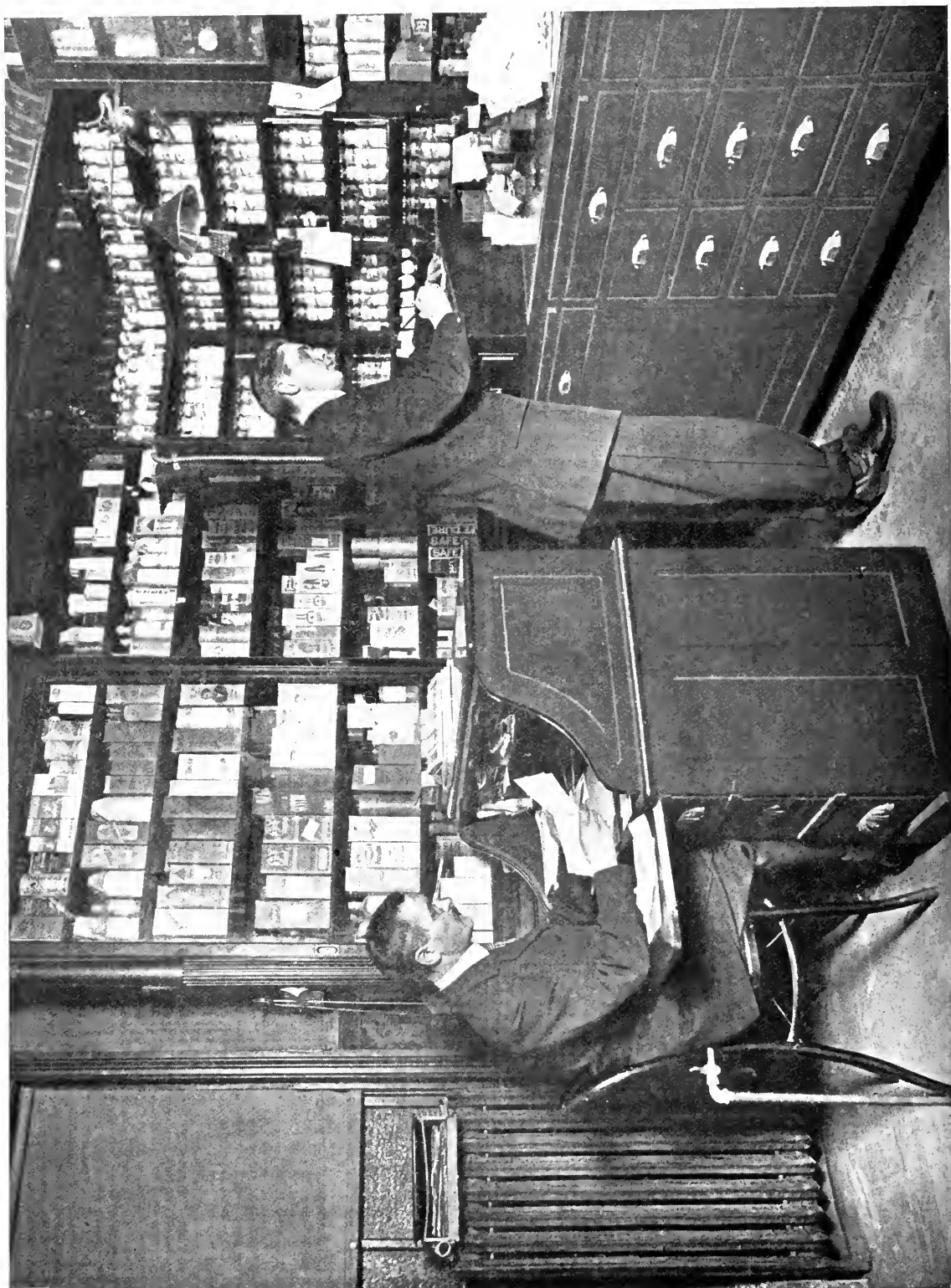


E. F. Frolinger, Nashville, secretary Tennessee Association.



Henry M. Faser, Oxford, secretary Mississippi Association.

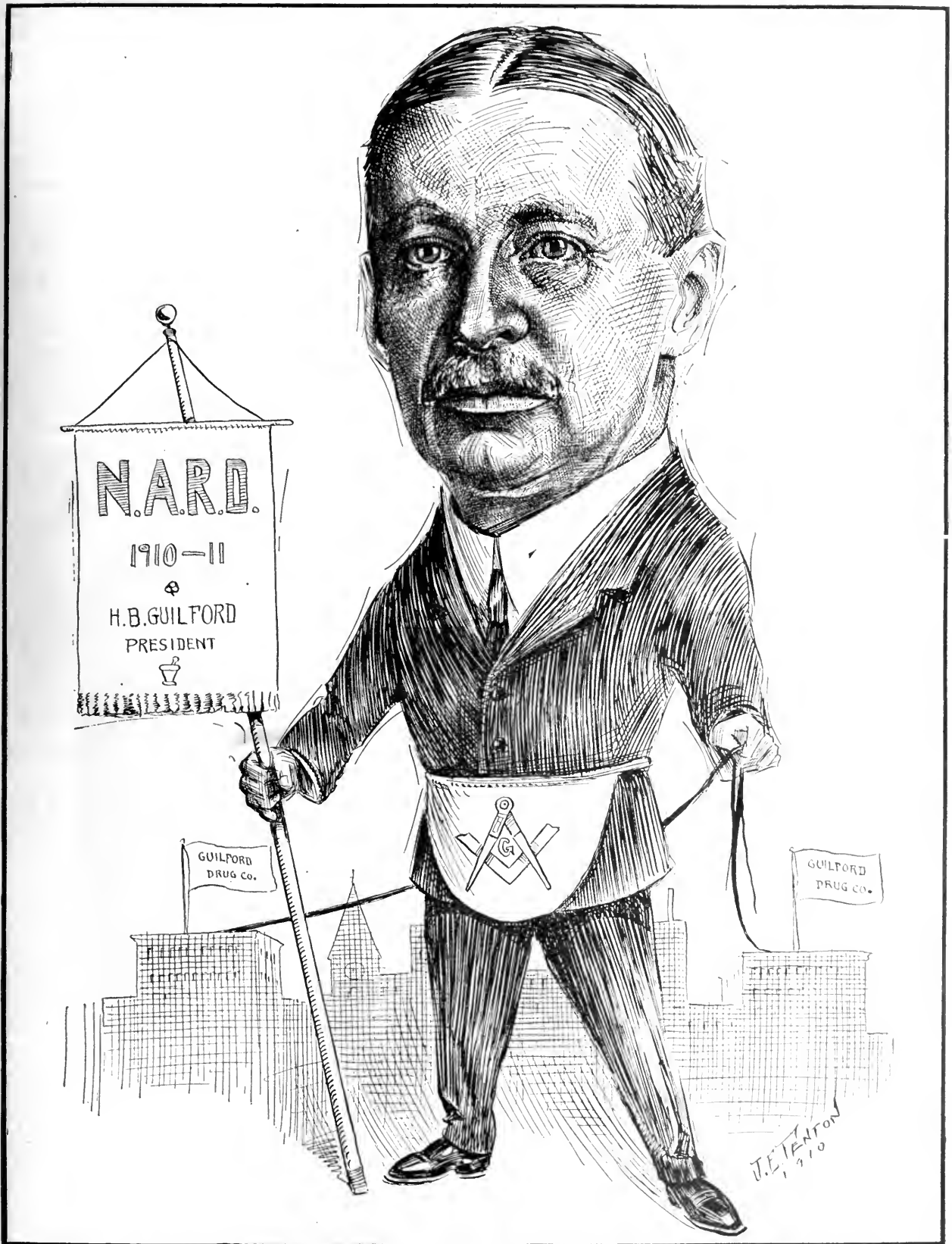
Secretaries of State Pharmaceutical Associations—the Men Who do the Work!



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

1. Charles Rehfuess, Philadelphia, Pa.



H. B. Guilford, president of the N. A. R. D., as seen by the Bulletin cartoonist.

(See illustrated article on Mr. Guilford on the next page.)

THE PRESIDENT OF THE N. A. R. D.

H. B. Guilford of Rochester, N. Y.—Has Two Prosperous Stores and a Third Under Way—Made Stockholders of His Best Clerks—Something About the Man Himself.

By HARRY B. MASON.

H. B. Guilford, president for 1910-11 of the National Association of Retail Druggists, is a man wise in his day and generation. The average druggist, you know, is pretty much of a slave to the long hours and the close confinement of the busi-



H. B. Guilford, Rochester, N. Y., president of the N. A. R. D.

ness. He cannot seem to get away from it. He cannot detach himself, so to speak, and view his business objectively. He is in it and of it all the time.

Not so with this man Guilford. He worked pretty hard and pretty systematically to get a start, as all men must who succeed, but the lesson to be read from his business prosperity is this, that he learned to build up an organization to look after the details, and kept himself more or less free to do the heavy thinking and to get some of the recreations and enjoyments of life as he went along.

GETTING BORN RIGHT.

But we can tell best how this was accomplished by looking back and telling the story briefly from the beginning. To start with, Mr. Guilford was

far-seeing enough to select a good birthday. It was July 4—in the year 1867. What can you expect but initiative and independence in a man with such a birthday as that!

Like every other boy, he was educated in the common schools of his town—which happened to be the village of Phelps in New York State. And like every druggist, he served an apprenticeship in a drug store in his home town. Later on he attended the Albany School of Pharmacy and profited so well by his studies that after the first year he passed the examination of the State Board of Pharmacy and received his registration certificate.

He admits now that he ought to have gone back and completed the course—but he was sadly in need of the necessary funds. So he secured a position in Fillmore, N. Y., and stuck to it just



Mrs. Guilford.

about a year. That Fourth of July germ was beginning to work, and Guilford wanted a store of his own. He bought a large and thriving establishment in Fillmore, having an immense and varied stock inventorying about \$600. He paid \$300 in cash and gave a chattel mortgage for the remainder. This store he conducted for two years, and in the meantime he worked about sixteen hours a day

and filled every position in the establishment from janitor up. It was good training—but it was a little slow.

JUMPING INTO THE CURRENT.

In 1891 Guilford decided to tackle Rochester. He had about \$1500 in money, and he was long on expectations. But the store that he was able to buy was in a location that didn't promise very well, and after working against the tide for some time Guilford decided to make a plunge and get into the current. So he opened a store at 138 State Street in Rochester and settled down to the task of building up a big business. At once things began to pick up. Trade grew. Guilford has what men call a long head, and during these early years he was using it. He began to see a large and prosperous business in the future, and he addressed



The Guilford store at the corner of Main Street and East Avenue in Rochester is seen at the left.

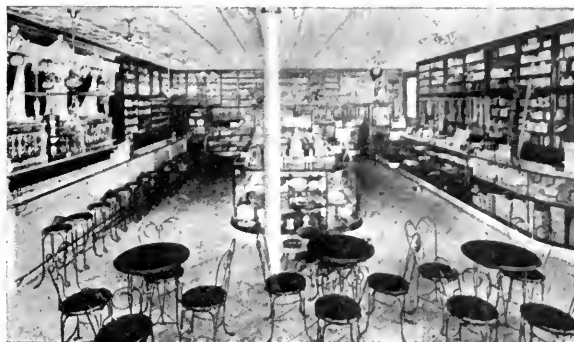
himself to the task of planning the methods and the policies which would best bring it about.

MAKING STOCKHOLDERS OF CLERKS.

In the first place he knew that he must get the hearty and the earnest coöperation of his clerks. He must have them plugging for him. Therefore it was that in 1896, five years after he struck Rochester, he caused the incorporation of the "Guilford Drug Co." His best men were made stockholders—the stock was given to them outright without conditions, and none of it was sold to outsiders. It was purely a family party.

Guilford saw that if he was to build up an organization capable of handling a big business, and the conduct of two or three stores, he must not only get the coöperation of his leading men, but he must so arrange things that he himself would not have to be chained down to one spot from early

morn of one day to early morn of the next, with Sundays thrown in. He must train his men to rely on their own judgment. He must himself



This is an interior view of the State Street store. The establishment is open all night.

learn to delegate responsibility. There is something in life besides work—and he must give himself some of the joys and recreations that every man deserves. He must, moreover, have that freshness of view and that initiative which can come only to the rested brain, and to the man who periodically gets away from his business and looks at it objectively from a distance.

So Guilford treated his men right. He developed their spirit of coöperation. He likewise developed their initiative and their capacity to run the business. He got them in the habit of looking after things themselves without expecting him to be on hand every minute of the day.

THE GUILFORD COMPANY TO-DAY.

That was in 1896. It is now the year of our Lord 1911—fifteen years later. At the present time



Mr. Guilford's residence in Rochester.

the Guilford Drug Co. is controlled by Mr. Guilford and four employees. Early this year the capitalization was increased from \$60,000 to \$75,000.

The company has two of the largest stores in the city of Rochester, and the employees number about 36. But, more than this, a third store is about to be opened in the very heart of the retail shopping district. Mr. Guilford is authority for the statement that it will be one of the most beautiful pharmacies in the East, and that from 25 to 30 people will be required to handle the proposition.

The Guilford Drug Co. conducts its business on aggressive lines. Its stores are in the down-town business district, and up-to-date methods of attracting and retaining trade are employed. Vigorous newspaper advertising campaigns are conducted, and resort is constantly had to publicity of other kinds. The courteous treatment of customers is one of the cardinal articles in the Guilford creed, and of scarcely less importance is what Mr. Guilford calls a first-class cash system.

GUILFORD, THE MAN.

Now a little about the man himself. He is and always has been a firm believer in the organization

of pharmacists. His support goes out to all efforts intended to lessen the burdens of the retail druggist. He has been a regular attendant upon the last ten meetings of the N. A. R. D., and he has done excellent work in that association. He has at various times been elected to one office or another in the organization; he has always been in the inner councils; he has been recognized as a man of strength, absolute integrity, and excellent judgment; and his promotion to the presidency at the Pittsburg meeting last September came as a matter of course.

Outside of pharmaceutical circles Mr. Guilford is known as a very ardent and enthusiastic Free Mason. He is a Past Master of the oldest Masonic lodge in Rochester, a member of Monroe Commandery No. 12, K. T., a member of the Rochester Consistory 32d degree, and a member of Damascus Temple A.A.O.N.M.S. He is also affiliated with the Rochester Lodge of Elks No. 24, and is a most active and interested member of the Rochester Athletic Club.

THE MANUFACTURE OF GREASELESS COLD CREAMS.

Three Formulas are Given as the Result of Much Experimentation—One of Them Claimed to be "Ideal"—Suggestions for Two Perfume Bases—Practical Hints Regarding the Manufacturing Process.

By H. B. MOLYNEAUX.

The readers of the BULLETIN OF PHARMACY are no doubt, like myself, always hungry for something new in toilet preparations, and therefore read every article or formula in the hope that they have at last found the ideal for this, that or the other preparation.

It is not my intention to introduce something new, but to present a formula which experience has taught me is an exceptional working recipe for one of the well-introduced toilet preparations that have always given the manufacturers much grief. This formula has been thoroughly "tried out."

It is evident to the close observer that very few of the non-greasy cold creams in the market are satisfactory from every standpoint. I do not claim that my formula will produce the *ideal* product, but it is the result of a great many long and tire-

some experiments which have extended over a number of years of laboratory work, and which have involved a try-out of almost every conceivable proportion of every material that has ever been suggested in this connection.

The first and most important feature of every preparation, as you must agree, is the choice of the proper raw material. With this end in view I will first discuss proper raw materials—how to choose them, and, where possible, shall give the tests for their identity and fitness.

MANUFACTURING DIFFICULTIES.

Non-greasy cold creams are composed principally of stearic acid or stearic acid soap. These will soon dry down to a powder through evaporation of the water by which they are emulsified; and

sooner or later this unfits them for the market. In order to obviate or lessen this trouble, manufacturers have devised every conceivable addition, such as mucilage of tragacanth, mucilage of Irish moss, arrowroot, hydrocarbon oil, glycerin, etc., according to the climatic conditions or the individual tastes of the manufacturers. I have found objection to all these additions, but least of all to glycerin.

Many manufacturers have gone to the extreme in the use of glycerin, on the plan that if a little helps, more is better, thereby making the cream just as objectionable to the consumer as a fatty cream is.

Many consumers do not like to use fatty cold creams because they leave a greasy feeling on the skin. Glycerin has the same objection when it is used in undue proportions, and it leaves the skin in a sticky condition. In fact, many women cannot use glycerin preparations that contain large amounts, as their skin is extremely sensitive and glycerin seems to produce a certain irritation.

The different ingredients and combinations used in the manufacture of greaseless creams are so diverse that it will be impossible to devote the space in this article to discuss them all; therefore I shall confine my discussion of ingredients to the ones contained in the formulas given.

THE STEARIC ACID MUST BE RIGHT.

Let us first consider stearic acid, which is found in the market in practically all grades, most of which are unfit for use in toilet preparations, as it usually has a disagreeable odor, is dark colored, or is objectionable from some other standpoint. For this preparation stearic acid should be perfectly snow-white and odorless, and rancid lots should be especially guarded against. If the least rancid, no matter how strong a perfume is used, the rancid odor will come out when the cream is rubbed into the skin.

Stearic acid is often found with more or less mechanical impurities, such as dust and grit, which should be separated by carefully melting on a steam or water bath at as low a temperature as possible. Keep in a fused condition for half an hour until all the mechanical impurities settle to the bottom, then decant, or, to use a less desirable means, allow to congeal in the same container used to melt it, and then scrape off the bottom containing the impurities.

The next and most important points to be considered regarding stearic acid are its saponification and its melting point. This article is official in the U. S. P., and I have found the tests therein given to answer all the requirements.

The U. S. P. test for saponification is as follows: "If 30 grains of stearic acid and 15 grains of dried sodium carbonate are boiled with 2 ounces of water, in a suitable flask, the resulting solution, while hot, should not be more than faintly opalescent." One thing must be carefully noted in the handling of stearic acid, or the preparations with which it is made, and that is to avoid contact with iron, copper or brass containers. Enameled or tinned vessels are suitable, providing they are in good condition.

The next item to be considered is powdered borax, and you will find it very necessary to bolt this article carefully and see that it is perfectly pure, in order to obtain the best results.

THE SELECTION OF AN ALKALI.

There are many alkalies used in preparing non-greasy cold creams, such as ammonia water, caustic potassa, caustic soda, etc. All have their disadvantages, no matter in what proportion they are employed. Their use will be noted more by the consumer than the manufacturer, as it is impossible to avoid an excess of alkali. This will cause a smarting irritation of the skin that is not easily overcome, and, where very pronounced, will leave some very bad effects if used for any length of time.

Of course it is necessary to use a certain amount of alkali to give the cream "body" and stability, and to make possible the incorporation of glycerin. You can readily understand that it is of the utmost importance to reduce the amount of alkali to the least possible quantity, and of equal importance is the choice of the particular kind of alkali.

To answer all these requirements, I have found monohydrated carbonate of soda, U. S. P., unequaled. It not only reduces the amount of alkali to the minimum, but gives the cream that smooth, satiny appearance so necessary to enhance its beauty and market value.

There are many methods of manipulation for non-greasy cold creams, and I will outline several that are more or less successful according to the individual taste and the practical experience of the operator. Taking into consideration the nature of

stearic acid, a cream can be made (1) either by melting it and forming a cream while in a liquid or oily state, (2) by forming an emulsion in the same way that fatty cold creams are made, or (3) by taking advantage of the solubility of stearic acid in a solution of hot borax water. The latter method will enable one to incorporate small quantities of glycerin with less danger of separation, but the operation must be conducted with extreme care, skill, and experience.

FORMULA NUMBER 1.

I have found the following formula one of the best in the emulsion line:

Stearic acid	36 ounces av.
White hydrocarbon oil.....	16 ounces av.
Powdered borax	1 ounce av.
Caustic potassa	1¼ ounces av.
Distilled water	172 ounces av.
Perfume to suit.....	q. s.

Melt the stearic acid on a water-bath, and when melted, add the oil. Dissolve the potassa in half the water and bring to the same degree of heat as the acid-oil solution. To the oil solution slowly add the caustic solution, stirring all the while until thoroughly saponified. Dissolve the borax in the remainder of the water and gradually add to the saponified mixture, continuing the heat until a perfectly uniform solution results. Remove from the water-bath and stir until cold.

Much depends on the perfume used, and also on the most advisable time to incorporate it. If an alcoholic perfume is employed that is likely to be injured or expelled by the heat, wait until the cream is only slightly warm before adding it. If, however, you are using one of the strong base perfumes of an oily consistency that will not be materially affected by this amount of heat, it would be much better to add it while the cream is in the liquid state and thus insure a more uniform mixture.

It is quite important that the cream be stirred without intermission during the entire process and until it is cold. While this cream is quite stable under ordinary conditions, a good "looker" at all times, and in fact in many ways a really handsome preparation, I could not recommend it as the best for the consumer.

You will have but little trouble from shrinkage; at least, it will "hold up" for a long while, but hardly long enough to market in a wholesale way. The hydrocarbon oil acts as a binder and lessens the shrinkage resulting from loss of water.

FORMULA NUMBER 2.

My next formula involves a solution process wherein I take advantage of the solubility of stearic acid in borax water. For this method it is necessary to have the stearic acid in a granular form. In order to granulate stearic acid with the least labor and expense, get a nutmeg grater called the "Ida" made in Germany by G. M. T. & Bros. In my opinion this is the best on the market for this purpose, as it is operated by a crank and fed by a hopper, making it easily handled. For the solution method, dissolve 10 ounces av. of powdered borax in one gallon of distilled water, heat on a water-bath to about 100° C., then gradually incorporate one pound of granulated stearic acid, stirring continually during the entire operation and while cooling.

This method makes a very elegant preparation. The principal objection to it is that it is apt to dry out very rapidly if not enclosed in air-tight containers.

It is possible to incorporate a small amount of glycerin, and some manufacturers have made the addition of either mucilage of Irish moss, mucilage of tragacanth, arrowroot, etc., with varying success.

FORMULA NUMBER 3.

In my opinion there is only one method for making non-greasy cold cream. By this method the resulting cream is as near the ideal as any yet brought to my attention. The formula has only been contrived after many long and trying experiments, and after trying out almost every conceivable combination and proportion possible. It yields the best non-greasy cold cream, considered from every standpoint, that can be made. Physically it is a most beautiful preparation, having a satiny finish and luster that cannot be duplicated by any other method. It will stand up longer with less loss of water than any cream on the market. To the consumer it has none of the disagreeable medicinal features so common among these creams, such as irritating or greasing the skin.

In the beginning forgive me if I impress upon you the necessity of following the *modus operandi* to the letter. One of the first steps in this operation is the use of a granite-ware kettle of from 6 to 8 gallons in capacity for making the quantity contained in this formula. Weigh out accurately:

3 pounds of stearic acid.
 24 ounces, av., of powdered borax.
 1¾ ounces, av., of monohydrated carbonate of soda.
 1½ pounds of glycerin.
 18 pounds of distilled water.
 Perfume to suit, q. s.

Weigh the water, glycerin, borax, and soda into a suitable vessel and cause solution by heating on a water or steam bath. When heated to the boiling point of the water-bath, gradually add the stearic acid, which has been previously granulated, stirring constantly all the time during the operation.

Boiling distilled water should be added from time to time during the process to make up the loss by evaporation. The operator can gauge the hardness or softness of the cream according to the amount of water used in the process. Less water will stiffen the cream; more water will soften it. Under no circumstances should cold water be added to the cream during the process, and under no conditions should either hot or cold water be used after the cream has set. The time to add the perfume, as I have already suggested, depends on the kind of perfume used. (See emulsion process.)

MANUFACTURING DETAILS.

It is very necessary that I call your attention to some of the important points to be observed in this process. First of all see that the ingredients used conform to the description in the beginning of this paper. Under no circumstances should the operator discontinue stirring the preparation during the process until the product is cold. This is of vital importance. Do not discontinue the heat until saponification is complete.

In order to give an idea to the operator as to when the cream is finished, it will be well to describe the reaction and physical changes that take place during the operation. On adding the stearic acid the solution will begin to thicken and gradually become a gelatinous mass. After due time, through heating and stirring, it will begin to fluff up, and finally it will "come down" all at once to a semi-transparent liquid. At this point it should be removed from the fire and perfume added. (See advice on adding perfume in the emulsion process.) The preparation must be stirred until cold and should never be filled into jars or packages while hot, as it is apt to separate.

This preparation can be colored to suit the individual taste. For instance, pink can be had by adding a few drops of solution of carmine, N. F.,

or any color in fact, by using one of the liquid perfume colors.

PERFUME BASES FOR THE CREAM.

A desirable perfume is a very essential requisite in this preparation, and I will give two excellent formulas for perfume bases that are especially adapted to cold creams. These bases are just as good, and yet cost only one-eighth of what some of the high-priced synthetic bases in the market do.

You will note that I give an estimated cost on each ingredient, so that the druggist may have an idea of what these two bases will cost him.

Formula No. 1.

4	ounces	Liquid Aubepine	cost \$	13
1	ounce	Concrete oil of orris.....	"	3 25
⅞	ounce	Borvordial, 10%	"	78
½	ounce	Oil of rose geranium, African.....	"	13
1	ounce	Benzyl acetate	"	10
9¾	ounces	Alcohol, deodorized	"	20
<hr/>				
16				Total....\$5 59

Formula No. 2.

8	ounces	Muguet royal	cost \$	1 25
¼	ounce	Otto rose	"	1 50
½	ounce	Otto Jasmine, "Bush"	"	2 00
1	ounce	Oil of ylang-ylang	"	2 50
¾	ounce	Artificial musk, 100%.....	"	05
6	ounces	Alcohol, deodorized	"	12
<hr/>				
16				Total.....\$7 42

Almost all manufacturers of essential oils or perfume bases carry these ingredients in stock. It is not my intention to advertise any particular manufacturer, but in order to aid those who do not know where to buy these substances I suggest W. J. Bush & Co., 100 William Street, New York, 185 East Kinzie Street, Chicago, or Linden, N. J. I have had splendid results from the ingredients bought of them.

I am especially fond of the second formula; it is exceptionally sweet and well adapted to creams of this order, and it will withstand a great amount of heat.

In compounding formula number 2, I have found that artificial musk does not readily dissolve, so I suggest a like amount of benzole benzoate in place of the alcohol. Artificial musk is readily soluble in this when slightly warmed.

Tastes differ very much as to the right amount as well as the odor to be used in creams, but I have found one ounce of either of these bases adequate for 20 pounds of product.

Nine Druggists Discuss Side-Lines.

Always anxious to help our readers improve their business and increase their profits, we invited nine druggists to give us the benefit of their experience with side-lines. They tell which line pays them best, how they display it, how they push it, what profit it yields, and to what extent they use their windows in bringing it before the public.—THE EDITORS.

POST-CARDS MY FAVORITE—AND WHY.

By J. EARL TAYLOR, PH.G., GRIDLEY, ILL.

Taking into consideration both the direct and indirect profits, I could hardly say which of the two lines, post-cards or magazines, has proved the better from a financial standpoint. I rather think I shall choose post-cards, for two or three reasons which I shall give.

DOUBLES HIS MONEY AT THE LEAST.

We figure about 100 per cent* as our direct profit in handling post-cards. We buy in fairly large



J. EARL TAYLOR.

quantities and always take our cash discounts. The cards that we retail for 5 cents, or 6 for a quarter, cost us from \$1.50 to \$2.25 per 100.

We always sort our cards. We have found that the manufacturers or jobbers of post-cards charge for them in proportion to their quality, regardless of the cost. We find among the cards of lesser

price some that in art finish are equal to the higher priced cards, and taking into consideration our customers' desires we have no hesitancy in placing them on the 5-cent rack.

As regards our two-for-five, or 25-cents-a-dozen cards, these cost us from 60 cents to \$1.50 a 100. We also sort these cards, and during the last Christmas holidays we had on our 5-cent side many cards that only cost from 75 cents to \$1 a 100. Some of them were equal to the high priced cards in art and daintiness, so you can see why, for one reason, I prefer post-cards!

We handle nothing less than the two-for-five cards. The highest cards on our rack at this moment cost on an average not over 75 cents a 100. You say this is too large a profit? No, it is not—if you can get it without losing out. We also sell cards from 10 cents each, or 3-for-25, up to seasonable cards at \$1 each. We never think of less than doubling the price, and many of our 10-cent cards cost \$4 a 100. Sometimes it is in the extra high-class cards where you can get your price. The people are as a rule not very good judges of the cost of a card, and here comes my second reason for favoring the post-card side-line. We absolutely buy of no firm that sells elsewhere in our town. Consequently the cards are rarely duplicated. We have no competition on the cards from 10 cents up, as the other merchants seem to consider them "dead stock." Let me say that, properly handled, they are certainly "live" ones.

INDIRECT ADVANTAGES OF THE LINE.

You can readily see that, so far as direct profits are concerned, we make 100 per cent or more on our post-cards. The indirect profits no one can estimate. "Goods well displayed are half sold," it is true. The *drawing* power of the post-card for use in sending short messages, for birthday remembrances, and the stork cards, the seasonable cards,

*That is, 50 per cent of the selling price.—THE EDITORS.

etc., call the customers to your store many, many times, and if the conditions surrounding your interior decorations and displays are right, they *may* see something else to purchase—if not at the time, then possibly in the near future. Another thing: people get into the habit of going to your store and that creates confidence. Why, four years ago we had several customers who only came in if they wanted a bottle of pills, and now come in like they were not afraid of a drug store!

As regards displays, we devote about 36 square feet on the north side of our store to picture racks filled with two-for-five cards. In the front showcase under the first rack we keep our high-priced cards. On the south side we give over to the 5-cent cards about 24 square feet of racks, and about 12 square feet of stand displays—inclined planes.

BOOSTING THE SALES.

Here is one strong point! We never allow a Saturday to come without changing our cards on the display racks. People are thus led to believe that we have new cards all the time, which, by the way, is a fact. But so many *never* attempt to change conditions, and are very short-sighted. The display rack over the back edge of your counter beats any other form for the simple fact that you show your cards well and they do not become soiled by handling.

The best methods for boosting sales we consider to be those already described—upright displays, constant changes, and window work. Then for special occasions combine newspaper ads., and you have our plan. We would not give up our windows for any other form of advertising that we know of. Seasonable cards we always show in our windows, and we also use the windows many times during the year for mixed cards. We always use price tickets—"choice 2 for 5 cents," etc., etc.

Summing it all up, I believe that the post-card line affords an elegant opportunity for profits. I believe it can be made to pay in proportion to the energies expended on it. We have had no old cards to get rid of for over a year now, but when we do we expect to dispose of them through the medium of our window displays, our newspaper ads., and our price tickets offering low prices.

The direct profits you can estimate closely, but the indirect ones are hard to calculate. About the only way is, after invoicing each year, to figure your net increase in business and profits over the

year before. Last year we registered a gain of 12.2 per cent over 1909. In 1909 we went backward 4 per cent, but in 1908 our increase was 15 4/10 per cent. Our invoice this year also showed an increase of about 14 per cent over 1909, and all bills paid, so you see "indirect" profits must be credited somewhere.

MAKING A PRACTICAL SUCCESS OF THE PHOTOGRAPHIC LINE.

By B. S. COOBAN & Co., CHICAGO, ILL.

We are expending most of our efforts on the photographic line, getting into it a little more each year. We consider it a good investment and one not requiring as much time as some other lines, for



B. S. COOBAN.

the manufacturers, through their advertising, send us customers who have a pretty good idea of what they want, and with a little effort one can induce them to purchase something else which they did not think they wanted at the time. This is our best paying side-line.

We devote two wall cases, 7 by 10 feet, to the display of cameras, kodaks, films, paper, plates and other paraphernalia, and also part of a floor case to kodaks.

The line pays a profit ranging from 25 to 40 per cent.

WINDOW-DISPLAY IDEAS.

We depend very largely upon our window displays for publicity, changing the display each week, and bringing out new things continually, especially

new pictures, which always attract attention. One week we will feature the Brownie line, from one to twelve dollars, showing prints made with these machines, and making much of the Brownie slogan: "Let the Children Kodak." Then we will follow with the ten-to-two-hundred-dollar line. While we do not carry in stock anything higher priced than thirty-five dollars, we can get anything wanted in two hours' time. We make a special point of apparatus and chemicals for developing and printing. We also do developing, printing and enlarging for those who have not the time or inclination to study it up and do their own work. We turn this work over to a specialty house, and clean up 33 per cent—all velvet.

Last December we held a guessing contest on a jar of pills, with a 3A Brownie camera as the prize. This created a great deal of interest. There were over 5000 guesses turned in, and every one was an ad. for our photographic department.

The manufacturers are very liberal with booklets and display cards, which we use freely.

It is advisable, yes, necessary, that at least one person in the store become thoroughly familiar with the working of the cameras, the developing and the printing, in order to render the novice assistance, and keep him from wasting too much material, for if he does not get results his pocketbook closes tight!

MAKE THE AMATEURS YOUR FRIENDS!

Photographitis is a new word used to designate the photograph disease, and the ailment has various stages from acute to chronic. What the dealer wants is to foster and nurse the symptoms until the chronic stage is reached. Do not encourage extravagance, but keep every kodak in your neighborhood working. We tell them to bring in their troubles. In most cases we can help them, and revive their enthusiasm, so that they go at it again, and the photographitis strikes in a little deeper.

A little intelligent criticism, giving praise where due, and stretching a point if necessary, is greatly appreciated, and brings you in closer relation with your customer. Convey the idea that "we are all friends together." Size up your customer and sell him the best outfit he can afford. Then make him *feel* that you are his friend. He will bring *his* friends to you, and no matter how trivial the trouble, look at it their way, and help them out—it will pay!

ENTHUSIASTIC ABOUT THE KODAK LINE.

BY ARTHUR G. LYON, COLDWATER, MICH.

It is a peculiar fact that the best side-line in this forty-year-old store is a line of goods that we have handled less than three years. Three years ago we noticed that we had a constant call for films, plates, papers, and camera supplies in general. We wrote the Eastman Kodak Co. for price lists, discounts, etc. After some little difficulty we secured the agency, and now this is our best selling side-line. As we size up the matter we find half a dozen good reasons for pushing this line of goods.

1. *Continual repeat orders.* The sale of a kodak is but a small beginning. The kodaker must be constantly buying supplies if he is to get any great amount of pleasure from his camera. He must have films or plates, chemicals, sensitized papers, and mounts for the finished pictures. Kodakery is a very fascinating pastime, and when one has become well inoculated we gain a regular customer.

2. *Exclusiveness.* Kodak agencies are limited. Most towns have but one—a wise provision of the Eastman Company to insure one good stock of their goods in each place rather than several incomplete ones. Even Detroit has only eight or nine agents. We get most of the amateur photographic business of the town and surrounding villages. New people are constantly gotten into the store, and new drug customers are gained continually.

3. *Price protection.* The kodak plan is simple yet efficient. Goods are invoiced at full retail prices from which the agent's discount is deducted. These retail prices must be maintained in all except a very few cases. The only penalty for violation of this agency agreement is that the agency will be withdrawn. However, it would be hard to find even a druggist who would care to cut prices on goods handled by no one else. The profit averages better than most kodak agents think. The agent's discount from the retail price of a kodak is 33½ per cent, and on papers and films 25 per cent, but the profit on the investment is actually 50 and 33½ per cent respectively.* A No. 12 camera costs \$8; profit \$4—50 per cent. We are careful to keep as small a complete stock as possible, thus turning over the capital several times a year. Another source of considerable profit is our finishing department, where we do developing, printing, and en-

*Profits, however, should always be based on the selling and not the purchasing price.—THE EDITORS.

larging for amateurs. This work amounts to several hundred dollars each year, of which about one-half is profit. One of our regular clerks who is much interested in the work spends a part of each morning and afternoon at it, and we are thus provided with a quick service which appeals to the amateur very forcibly. All work brought in before 9 A.M. is ready to turn out at 6 P.M. the same day.

4. *Clean goods to handle.* Kodak goods are ready to sell in most cases without even wrapping. As a rule customers know about what they want and so are taken care of very quickly. However, when one wishes to look at cameras, we give all the time necessary, knowing that in a short time we shall be well repaid.

5. *Seasonable goods all the year.* Although most of the business is done from May to November, still every month is a good kodak month. The summer months are especially active photographic times, and there is also good business clear through November, while in December we dispose of quite a few kodaks for Christmas gifts. Then the long winter evenings following the holidays are dandy times for the amateur to get out his summer and fall films, to make prints for his own album and for his friends. So there is no time when we are not more or less busy with kodak goods.

Best of all we feel that with the kodak line we are not wandering very far from the drug business. For who should be in a better position to understand and explain the chemistry of photography than the druggist?

CIGARS AND CIGARETTES—ESSENTIAL POINTS IN ATTRACTING AND HOLDING CUSTOM.

BY FRANKLIN M. APPLE, PHILADELPHIA, PA.

To reply to your request for information concerning side-lines in an intelligent and accurate manner is a very difficult task, as it is almost impossible for a retailer enjoying a moderate sized business to determine exactly what just proportion of expense shall be charged up against each department, and therefore what the department profits are, but I shall endeavor to make replies to your several inquiries, taking them up seriatim, as follows:

1. My best paying side-line is cigars and cigarettes. I include the latter, as the tendency in this vicinity is very largely to substitute "coffin nails" for Havanas.

CASES FOR THE GOODS.

2. My display of the goods is confined absolutely to cases built especially for the purpose. Cigarettes, for instance, should not be kept in humidors or moist rooms, and it is also more difficult to keep cigars properly when cigarettes are stored in the same place. I use a 5-foot Silent Salesman case for cigars, upon the top of which rests a 3-foot cigarette case.

3. As for increasing the sales, I depend upon the quality of the goods in my stock chiefly for results, ever mindful, too, that it is essential to have the



FRANKLIN M. APPLE.

stock kept in prime condition. I always endeavor to carry a good variety of popular brands, allowing my customers to indicate which they prefer, as I am no smoker myself. I do not forget that I am here to serve the public and cater to its wants, and that it is more probable that it will patronize me more frequently and steadily if I can satisfy its tastes. I never handle a cigar costing less than \$35 a thousand, thereby establishing a minimum standard of quality.

THE PROFIT.

4. The profit yielded by this line can only be estimated in the form of gross profits, based upon the cost, and in these calculations I am most glad to state that I have no necessity of reckoning upon pilfering by my present corps of assistants. The gross profit is 30 per cent. This may appear as a

low percentage, but the grasping tendencies of the manufacturers of cigarettes are reducing the profit upon their goods, as no increase can be made in the selling prices. I make no attempt to follow the extremely low cut-prices prevailing down-town, as profits, apparently, are not interesting to the merchants in that portion of our city of homes. As for pushing lower priced goods netting a larger percentage of profit, I do not subscribe to that policy for any one located as I am in a residential section. for the time consumed in extolling the merits (?) of such stuff is more valuable than the extra few dollars gained. When I encounter what appears to be a very good cigar, free from artificial flavors, I stock it in moderate quantity and let it win its way on its own merits. I am guided largely by appearances externally and internally, for we usually make an examination of the contents of a new cigar, and it sometimes pays to have acknowledged cigar experts smoke a sample or two and render their verdicts before stocking the article to any extent.

DOESN'T BELIEVE IN USING THE WINDOW.

5. I never place these goods in the show window, neither do I permit signs to be attached to my store windows and sidewalk, for I wish to emphasize the fact that mine is a drug store first and a cigar store last, so that no mistake can be made in identification.

In conclusion I wish to state that I do not allow my cigar department (or any other department) to interfere with my prescription department's interests, for obvious reasons. I am not ready to be classified in our city directory as a retail cigar dealer or anything else than a retail druggist.

CANARY BIRDS AND GOLDFISH.

By E. B. HEIMSTREET, PALMYRA, WIS.

My best side-lines have been goldfish and canary birds. I buy half a dozen to one dozen canaries at a time. When they come I put half of them in good cages and hang them up around the store; the others in small cages I put in the window.

Besides realizing a fair profit on the birds themselves, I sell a good many cages and considerable bird-seed, cuttlebone, etc. A druggist will be surprised at the sales he will make in these lines if he has the birds. I buy the seed in 100-pound bags, mix it and put it up in pound boxes.

Goldfish I buy in lots of 200 and I sell them at

25 cents each. They also add to the appearance of the store and afford a good profit. They lead to the sale of goldfish food and globes of all kinds. I have handled these things as a side-line for forty years past, and have been well pleased with the results.

I just want to say to those who think of going into it that the best fish in the United States can be bought of Shoup & Heck, of Waldron, Ind., and the best birds of Fred Kaempfer, 88 State Street, Chicago. I speak of this because I have made purchases all over the country, and have found that there is a big difference in both birds and fish. The above firms have always given me the best of satisfaction.

THE KODAK LINE.

By ARTHUR L. CHENEY, MORRISVILLE, VT.

Our chief side-line is made up of kodaks and photographic supplies. We carry the Eastman line and we devote one section of a wall-case in the main store to the goods.

My office windows are located on the main street,



ARTHUR L. CHENEY.

and in these I always have something in the line of cameras or supplies. The goods are sure to catch the eye of passers-by. I also use newspaper space during the season when there is the most interest in photographic work—that is, during the early spring and summer. Another advertising scheme that we follow out is to do developing and printing promptly, and to instruct new customers in the use of both cameras and chemicals.

The Eastman line pays from 25 to 40 per cent,

and it is a full-priced proposition. Every one has to pay the same price the world over.

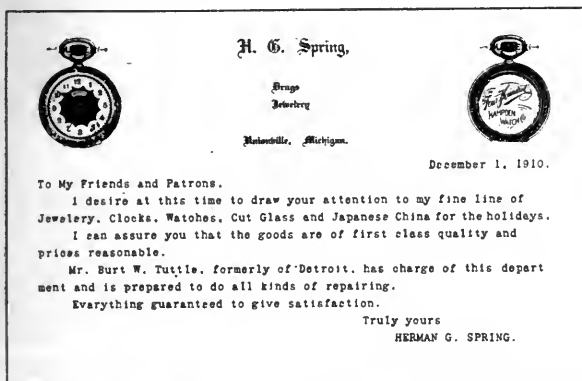
Making a success of the photographic business is dependent on a thorough understanding of the work in all of its details, and on a willingness of the salesman to give frequent hints to assist customers and keep them interested. It must be remembered that the customer who does good work with his camera will use many more supplies than he would otherwise, and he is a constant booster for the business. We have found, too, that to do developing and printing for those who do not care to do it for themselves is profitable. Furthermore, it helps sell the line if you get the work and do it well.

JEWELRY.

BY H. G. SPRING, UNIONVILLE, MICH.

I may answer your questions as follows:

1. Our best paying side-line is jewelry. Unionville is a small town and there is no other jewelry store in the place.
2. We devote to this line our principal show-case as well as a wall-case.
3. In pushing jewelry we utilize the ordinary ad-



Letter sent out by Mr. Spring to exploit his jewelry line at the holiday season.

vertising methods. In addition to this we send out a letter through the mails at the holiday season. The letter used last December I am sending you a copy of.

4. As for the profit yielded by this side-line I may say that it pays my clerk's salary.

5. We do not use the windows for exploiting jewelry except during the holiday season.

6. I would not advise druggists in general to carry jewelry as a side-line unless they had a complete stock of a good quality and in addition kept a watch repair man.

PHOTOGRAPHIC GOODS AND CANDY.

BY W. E. BINGHAM, TUSCALOOSA, ALA.

1. Confectionery and kodak supplies represent our best side-lines.
2. To confectionery we give a whole section of shelving, and we also have a display on a table in the front part of the store. Kodak supplies occupy one entire show-case.
3. In advertising these goods we employ the



W. E. BINGHAM.

booklets and the literature furnished by the manufacturers.

4. On both candies and kodak supplies our profit averages from 25 to 30 per cent.

5. We use the windows very little for these things, and I may say in general that the front of our store is not very well arranged for window displays.

6. When we bought out the Collins Drug Co. we fell heir to their agency of Huyler's confectionery and the Eastman kodak line, and we have found them both winners. We do a very good mail-order business in kodak goods. We do not develop the negatives ourselves, but we arrange with a local photographer to do this work on a commission basis.

CIGARS.

BY WILHELM BODEMANN, CHICAGO, ILL.

1. Our best-paying side-line is cigars.
2. We devote one 10-foot show-case to the goods—a case which opens from the top so that patrons can take their pick without the necessity of hauling over all the boxes.

3. The best advertisement for a line of cigars is in keeping the cigars themselves in good condition, the boxes always in good order, never putting in fire-sale bargains, and always selecting the best possible brands. It pays to handle the best cigars just as much as it pays to give Parke, Davis & Co.'s pharmaceuticals the inside track.

4. As for profits, I may say that we have a good



WILHELM BODEMANN.

box trade and that while the profits vary under such circumstances, the line averages about 30 per cent on the whole.

5. No, we never put cigars in the window. It would render them unfit for sale—except in the Fatherland (Germany), where no cigar is salable unless it is bone dry. My father was a smoker: he used to buy 5000 cigars at a time and put them on the highest shelf in the warmest room!

6. This about closes the case for the defense.

STOCK AND POULTRY FOODS.

By F. C. CAHOW, READING, MICH.

In response to your questions as to our best-paying side-line, I would reply as follows:

1. Stock and poultry foods pay us best of anything outside of the strictly drug line.

2. As for displaying these goods, a very small part of our store is used for this purpose.

3. The methods we employ in advertising this

line are our own personal push and "continual hammering" when farmers and poultry men are in the store, besides the coöperation of the firm whose goods we handle (the Hess line).

4. The profit on the goods is about $33\frac{1}{3}$ per cent in our store. This, of course, depends upon where you are and upon your expenses. It varies from 20 to $33\frac{1}{3}$ per cent.

5. To bring our side-lines before the public we use our window a great deal, also our local paper from four to six weeks in the year.

6. The success of any side-line in a drug store depends upon the demand that may be created and the amount of hard work the druggist wishes to do.

NO SIDE-LINE.

By M. H. GOODALE, BATTLE CREEK, MICH.

I may surprise you by saying in reply to your inquiry that we carry no side-lines in this store—that is, we do not have the lines generally so considered. Our business is comprised almost entirely of drugs, and even our sundry cases are lightly stocked. I may say, however, that we are rather unique in this respect, as the store is the oldest in the city. While our prescription business is very light, we have a heavy drug trade and hardly feel the necessity of branching out in side-lines, especially since we have no room in the store for displaying such lines.

About Antiseptics.—

Professor Delepine says that antiseptics and disinfectants cannot be graded mathematically according to their power, because of the differences even in the same species of bacteria, and also because of differences due to age and environment. Antiseptics may entirely inhibit the growth or development of germs, so that cultures will not produce growth, but if the conditions are properly adjusted these germs will be resuscitated. If used too strong, antiseptics may paralyze germs without killing them, and in too weak solutions active antiseptics, such as phenol, will actually stimulate the growth of the germs. Chemical substances that have the reputation of being strong disinfectants, because they easily cause the death of non-sporing bacteria, are under ordinary conditions practically without lethal effect upon the spores of the same bacteria. The disinfectant power of any agent depends upon the strength of solution, the number and vigor of the germs, the time of contact, the medium in which the germs are contained, and the temperature. In the case of phenol, a dilution of 1 in 10 may kill in one minute, while 1 in 150 is just as effective in one hour, but greater dilutions than 1 in 400 will not kill after very prolonged exposure, and in some instances will stimulate the growth of the germs.

BOARD QUESTIONS ANSWERED.

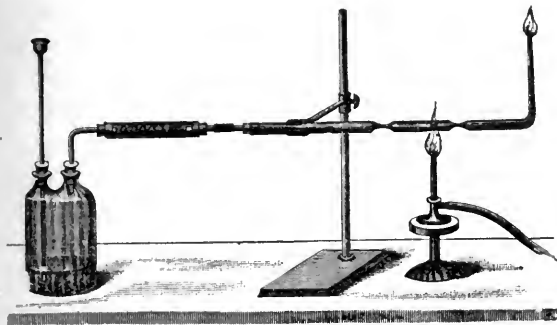
AN ILLINOIS EXAMINATION.

CHEMISTRY.

(Continued from February BULLETIN.)

10. Give the name of and describe a test for arsenic.

The apparatus consists of a hydrogen generator connected to a calcium chloride tube, which in turn is connected with a piece of hard glass tube about a foot long and $\frac{1}{4}$ inch wide, drawn out at intervals of 3 inches to a diameter of $\frac{1}{8}$ inch. Hydrogen is generated in the flask by the action of sulphuric acid on zinc, and examined for its purity by heating the glass tube to redness at one of its wider parts for at least thirty minutes. If no trace of a metallic mirror is formed at the constriction beyond the



Marsh's apparatus for the detection of arsenic.

heated point, the gas and the substances used for its generation may be pronounced free from arsenic. Both zinc and sulphuric acid often contain arsenic.

After having thus demonstrated the purity of the hydrogen, the suspected liquid, which must contain the arsenic either as an oxide or chloride (not sulphide) is poured into the flask through the funnel-tube. The glass tube heated as mentioned, at one of its wide parts, will show a bluish-black metallic mirror at the constriction beyond. Arsenic spots treated with solution of hypochlorites dissolve readily; antimony spots which are similar are not affected.

MATERIA MEDICA.

1. Define Natural Order as applied to Materia Medica.

Nearly related genera are brought together in groups known as families. Thus we have the Mint Family known as *Sabiatae* which comprise a number of related genera, such as *Mentha*, *Hedeoma*,

Salvia, etc. Still larger groups of related families make up Orders, as the *Graminales*, including the *Gramineae* or Grass Family and *Cyperaceae* or Sedge Family. Orders make up classes and subclasses, as the *Monocotyledons* and *Dicotyledons*.

2. To what family does Fennel Seed belong? (a) What are the characteristics of their family? (b) Name four other plants of the same family.

Umbelliferae or carrot family. (a) The arrangement of the flowers and fruit in compound or simple and generally involucrate umbels. (b) Anise, caraway, conium, and coriander.

3. Distinguish between a root and a rhizome and give an example of each.

The root is that portion of a plant which grows downward into the earth through the force of gravity for the purpose of furnishing a support for the part above ground and to absorb food substances from the earth. A rhizome is an underground stem which sends up foliage branches from the upper surface and sends down roots from the lower surface. A root has no buds; a rhizome has. *Triticum* is a rhizome or underground stem; *belladonna* is a root.

4. Name a leaf and a bark that have cathartic properties.

Senna and *cascara*.

5. From what plant is Opium obtained? (a) Explain the method of obtaining it. (b) Name and give the medicinal action of its most important active principle. (c) Also a salt of the latter having a different action.

Poppy. (a) Opium is obtained by making transverse, oblique or longitudinal incisions in the unripe capsule; the latex which exudes is collected when partly dry and made into a mass. This is then enclosed in a covering of *rumex* or poppy leaves and further dried, subsequently being packed in bags with *rumex* berries to prevent the masses from sticking together. (b) Morphine, a soporific and analgesic. (c) Apomorphine, the salt of an artificial alkaloid made from morphine, is an emetic.

6. What is pollen? How is it useful in plant life?

Pollen is the male element of the plant, a powder that fertilizes the female element. It fertilizes the female flower for the production of seed and thus makes possible reproduction and the continuance of the species.

7. Name two forms of crystals and give an example of each.

Sodium chloride cubical crystals are an example of the simple form; crystals of calcium oxalate in rosette aggregates are an example of the compound.

8. Define Astringent; Sedative; Diuretic; Diaphoretic; Narcotic.

Astringents are agents which produce contraction of the muscular fiber and condensation of other tissues, the first probably by direct irritation, the second by precipitating its albumen and gelatin. They also lessen secretion from mucous membranes. Sedatives are agents which exert a soothing influence on the system by lessening functional activity, depressing motility and diminishing pain. Diuretics are agents which promote the secretion of urine either by raising the local or general blood-pressure and so increasing the renal circulation, by stimulating the secreting cells or nerves of the kidneys, or by flushing the kidneys with water. Diaphoretics are remedies which increase the action of the skin and promote the secretion of sweat. When they act energetically so that the perspiration stands in beads upon the surface, they are known as sudorifics. Narcotics are agents which lessen the sensibility of the individual to the external world. At first more or less excitant to the higher brain and stimulant to the mind and to all the bodily functions, the next stage of their action is one of profound sleep characterized by increasing stupor, and this, if the dose has been sufficient, is followed by coma and insensibility (narcotism). Finally death occurs from paralysis of the medullary centers which govern respiration and the other functions of organic life. In proper medicinal doses, narcotics relieve pain, allay irritation, and induce sleep, thus serving great therapeutic use.

9. What are the medicinal properties of Squill; Jalap; Nutgall; Cantharides?

Squill is largely used for its stimulating, expectorant, and diuretic properties. It may be given with benefit in bronchitis. As a diuretic squill is frequently employed in dropsy. Jalap is a hydragogue cathartic. Nutgall has a powerful astringent effect. Cantharides is employed in medicine externally for the purpose of producing a blister. Internally it is given in very minute doses as a stimulant for the kidneys when these organs are torpid, and also for its stimulant effect on the skin in dry, scaly cutaneous diseases.

10. Give the official name of three drugs obtained from the sheep.

Glandulæ Suprarenales Siccae, Glandulæ Thyroidæ Siccae, Adeps Lanæ Hydrosus.

11. What is the official name of Levant Wormseed? (a) Name its active principle and give the dose and antidote.

Santonica. (a) Santonin 1 grain. Use a stomach pump if called in time. Give a non-oily cathartic and then treat symptomatically.

12. Give the official name, dose, and antidote for the following: (a) Laudanum; (b) Prussic Acid; (c) Carbolic Acid; (d) Fowler's Solution; (e) Corrosive Sublimate.

(a) Tinctura opii, 8 minims. Tannic acid or vegetable astringents, followed by evacuation of the stomach, if the poison has been taken by the mouth. Use a stomach pump at intervals. Give strong coffee. Keep the patient moving. Strychnine antagonizes the respiratory paralysis. (b) Acidum hydrocyanicum dilutum, 1½ minims. If in time to do anything, give cobaltous nitrate. Per and proto salts of iron with magnesia are used. Application of cold to the chest and spine, the internal administration of chlorine water and aromatic spirit of ammonia, with inhalations of ammonia gas, have been employed with some success. (c) Phenol, 1 grain. Magnesium or sodium sulphate is the chemical antidote. The condition is treated by applying external heat, the administration of demulcents and opium to relieve the pain, and by giving stimulants to prevent or overcome shock. Give large quantities of any soluble sulphate. (d) Liquor potassii arsenitis, 3 minims. The antidote for arsenic is hydrated ferric oxide, freshly prepared by precipitating a solution of ferric chloride with sodium carbonate—or as the official ferric hydroxide with magnesium oxide. (e) Hydrargyri chloridum corrosivum, 1/20 grain. The antidotes are albumin, magnesia and milk. The white of one egg with each 4 grains of the poison forms the albuminate, which must be at once evacuated by emesis or the stomach pump.

13. Give the chemical antidote for the following: (a) Phosphorus; (b) Nitrate of Silver; (c) Nitric Acid; (d) Sugar of Lead; (e) Oxalic Acid.

(a) Potassium permanganate. (b) Sodium chloride solution. (c) Alkalies, as sodium carbonate or bicarbonate, magnesia or chalk. (d) Sodium or magnesium sulphate. (e) Calcium carbonate or hydrate (as lime-water, chalk, whiting, wall-plaster, in water).

(To be continued.)

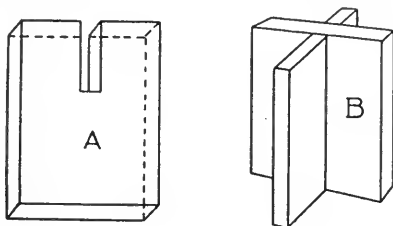
DOLLAR IDEAS.

The editor of the BULLETIN will pay \$1 in cash for every practical idea accepted for this department. What is wanted are good formulas, dispensing kinks, book-keeping suggestions, business plans, advertising schemes, new soda drinks, and everything else of a novel and useful nature.

AN INGENIOUS SHELF SUPPORT.

Emil Reyer, South Bend, Indiana: Having devised a shelf support useful in window displays, I am sending sketch and description of it. The device may be of service to others. It can be made with little trouble from boards sawed from packing boxes. The supports, of course, can be built of such size as to suit the individual convenience.

Those made for the store where the writer is employed are 1 by 6 by 6 inches. Saw the pieces from the board, observing the size desired. Then saw out a section of a width exactly equal to the



thickness of board shown in sketch A. This slit extends into the piece just one-half the height of the support. The two pieces for each support are made alike and can then be slipped together as shown in sketch B.

The pieces should then be stained, using a color that harmonizes with the wood. These supports can be used for glass shelves, or package goods, etc. As they cost little more than the time to make them, one can have quite a number of various sizes. When not in use, slip the pieces apart and they can be stored away in very little space.

USING A DELIVERY BASKET AS AN ADVERTISEMENT.

Edwin R. Mohler, Philadelphia, Pa.: Every bottle or package that leaves the store is delivered by our porter in a neat covered basket. Upon two sides we have painted these words "Rehfuss Drugs," in heavy black letters. It does not fail to attract

people's attention as the young man passes along the street. The basket is one of the best ads. for your store that is possible, as it impresses upon people both one's name and business. It has also been the means of increasing our business. People send in



orders for goods or prescriptions by handing them to the porter as he happens to pass by their house. That is a daily occurrence with us and is entirely due to those two words on the basket.

A NEW METHOD OF MAKING ROSE-WATER.

H. S. Carpenter, Detroit, Mich.: This is by no means a U. S. P. product, but is every bit as satisfactory and considerably cheaper to manufacture:

White rose extract	½ ounce.
Boric acid	1½ ounces.
Aqua	1 gallon.
Purified talc	2 ounces.

Mix and filter. Mix the boric acid and talc with the white rose perfume and gradually rub up this mixture with warm water. Pour it into a filter and add water through the filter to make up the required amount.

We find that the boric acid has a small healing and antiseptic value, which is very desirable in the hand lotions, rose-water, glycerin, etc.

By this method one can make a gallon of rose-water for about twenty cents, and a pretty good article at that.

DRUG-STORE SKETCHES.

ALGERNON MEETS HIS WATERLOO.

By CLEO C. LONG.

"Me selling perfumery indeed!" remarked Algernon from behind the fragrant case of toilet goods. "Why, I don't know lilies with the lid off. I'm the boy prescriptionist of the Middle West, I am, and what do you think of his nibs for putting me behind *this* counter?"

"Proba'ly thought it might teach you some scents," remarked the pretty cashier, with a wink at her cash register.

"Wow! She certainly did put one over that time," admitted Algernon. "But honest to goodness, Gert, I don't know this stock. What's the matter with Miss Grace? Sick, yes?"

"Sick, yes. All you gotta do I s'pose is to read the labels on the goods. You can read printing, I presoom?" suggested the cashier. "It's likely to be a busy day in cosmetics, too," she continued cheerfully. "The new show across the street, 'Gushy Girls,' is just crowded with chorus loidies. I saw 'em go in for rehearsal. They're always dandy toilet customers."

"They're some on the soda fountain, too," proudly announced the angel-faced boy who presided over that department. "I've chalked up a new drink for their special benefit—'Gushy Girls' Guzzleit.' Guess that's a poor sign, huh?"

"What cosmetics do they buy, mostly?" asked Algernon, with anxiety. "Pew-fume, powder, rouge, and all the outfit? I know exactly what to say if a Gushy Girl comes in and asks me for powder."

"What?" asked the soda boy, biting readily.

"Ah, powder? Certainly, madam," said Algernon, assuming his most salesmanlike manner. "Face, gun, or bug?"

At this juncture it became evident that the rehearsal across the street was over, for groups of chorus girls came out through the stage entrance, and several of them promptly crossed the street to the Pillpenny Pharmacy and settled themselves on the stools that lined the soda fountain.

"Feels like lunch time to me, girls," said a languid blonde, casting aside her cheap fur collar with all the air of a grande dame at Delmonico's. "Hot

chock'let for mine and plenty of suds on top, Kiddo."

"How many wafers goes with the chock'let?" asked another. "Gee, only two? Say, girls, I put it to you, ain't this the close town? 'Member that swell fizz counter in Louisville where they gave you three styles of wafers—plain, Graham, and frou-frou? And two of each kind. That was some food garage, wasn't it? What's in the sandwiches?"

"Say, look girls, pipe the sign, 'Gushy Girls' Guzzleit!' Me for that whatever it is. I'll be game. What's it like, Gastong?"

In view of the fact that it was a cold day, and that the girls were obviously seeking sustenance rather than froth, the genius of the soda fountain made a lightning change in his mental picture of the dainty thus advertised.

"Best stuff you ever tasted," he announced with conviction. "It's a hot tomato bouillon (he was very careful to say *to-mah-to*), rich and creamy, with a dash of whipped cream on top, and, er—about four wafers to a portion."

"That's the stuff."

"Me for that."

"Set her up, little one," chorused the chorus, and in a few minutes the girls proceeded to make good the title of the dainty dish set before them.

In the meantime Algernon was not happy. He was never happy unless occupying the stage center, and the chorus girls seemed unaware of his existence. They sipped their bouillon, and nibbled their crackers, and jollied the soda boy, assuring him of their entire approval of his concoction. They also expressed their intention of taking meal tickets on his counter for the remainder of the week, and of putting the rest of the chorus girls wise to the excellence of his cuisine.

Finally Algernon could stand it no longer. As the girls rose and approached the cashier's cage with their ten-cent checks, he seized an atomizer and began to spray the atmosphere with violet perfume.

"U-um, where's the good smell comin' from? Oh, girls, I gotta have some cold cream—wait a minute," said she who wore a bright red feather in her Tyrolean hat. "Have you got Smearem's cold cream?" she asked, approaching the toilet goods with dignity.

"Certainly, madam. A shaving cream, is it? I beg your pardon! That's what I use it for, of course," confided Algernon, who had no suspicion of down on his countenance. "A massage cream,

I intended to say. Now here is an article we find especially in demand among all the leading actresses, madam. Only last week Olga Nethersole bought a pound jar of this. She said that it was undoubtedly the most auspicious compound she had ever applied to her countenance. Removes paint equal to turpentine—better in fact. Perfectly delicatessen and non-partisan. Guaranteed not to become discordant in any climate."

"You put up an elegant line of talk, but it don't mean nothin'," said the girl. "Nix with the Nethersole story, and anyway I want Smearem's cold cream. Have you got it?"

"One moment, I'll look again. 'Smearem's,' 'Smearem's'—well, here's Smugnut's and Snitch Hazel and Goose grease—"

"Aw, add up your talk, kid, add up your talk," urged the Red Feather. "What's the answer? Have you got Smearem's Massage Cream or have you not? 'Cause that's what I use on my map, Olga to the otherwise notwithstanding!"

"I deeply regret to inform you," admitted Algernon, "that for the moment Smearem's Massage Cream is out of stock. But we have one of the most complete lines of toilet water and perfumery ever instigated. Try this, for instance. Isn't that a swell article? The most perfect, permeating, pervasive and permanent perfume ever permitted to grace a lady's—er—pergola. Redolently speaking, it is designed to suggest all the odors of Araby. It is a bouquet, ladies, not a single scent. A blend, a harmonious inhalation of half a dozen delicious fragrances, suggesting now the lily or the rose, again the violet or carnation, or perchance the—"

"Onion?" suggested one of the girls as Algernon paused for inspiration. "Say, Poicy, you sure are the most wonderful little press agent that ever shuffled the syllables. You've missed your calling, all right, but when it comes to a show-down I'll bet I'm there with the stuff as swift as you are. If you think because we're in the chorus that it's up to you to get gay and string a line of talk that gives a girl the earache you've missed your cue. And let me tell you, horizontally speaking, that your remarks are exceedingly eppycack, and if a lady can't buy a jar of cold cream without being treated to a loose shower of lingo it's time to put the rollers under somebody, and it might as well be you."

Whereupon the chorus girls swept out in a body, leaving a crushed and shaken Algernon, who for once had not a word to say in reply.

LETTERS.

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

HINTS ON PRACTICAL PHARMACY.

To the Editors:

Here are a few suggestions along the line of dispensing:

LINIMENTUM TEREBINTHINAE ACETICUM N. F.

Stokes's Liniment, which is well known to my professional brothers, often thickens and hardens on standing if kept for some time. When a lucky 5 or 10 cent call for the liniment is received, the drug-



LEO TARTAK, PH G.

gist, in order to dilute the liniment so as to be able to pour it out from the stock bottle, adds some turpentine, or water, or a mixture of both.

To overcome the thickening one should use the yolks of the eggs only and a small part of the white. Of course fresh eggs are required, not stale ones containing hydrogen sulphide in excess. By removing part of the whites and using only the yolks of the eggs in the preparation, one obtains a product that will never thicken on standing.

SYRUP HYPOPHOSPHITES COMPOUND U. S. P.

When this preparation is made according to the official formula it often ferments on standing with

the formation of a green coating on the top of the syrup. I have found by experience that the addition of 5 per cent of glycerin will prevent fermentation. The container should be kept closed.

CRETA CAMPHORATA.

There are many methods in preparing camphorated chalk for the hand sales. Some rub camphor with alcohol in a mortar and then add the chalk. Others use spirit of camphor, incorporating it with the chalk powder, and many other ways.

A very good and easy method is to place a block of camphor in the stock bottle and then fill it with the powdered chalk. This yields a very fine product owing to the sublimation of the camphor, and it is very easily done.

TINCTURE OF LARKSPUR.

There are many different ways of making tincture of larkspur, but no matter which method is used, there are always difficulties in filtering. To overcome such trouble strain the seed through gauze or other medium.

Saturated solution potassium iodide (1:1) often darkens on standing. Free iodine is liberated, rendering the drug unfit for dispensing. To prevent the presence of uncombined iodine add a small quantity of sodium hyposulphite, $\text{Na}_2\text{S}_2\text{O}_3$, from 0.5 to 1 per cent. The therapeutic action of the solution is unaffected.

ELIXIR AROMATICUM.

To prepare U. S. P. simple elixir, a purified talc is required as a clarifying agent. The filtration is very slow, but if pure carbonate of magnesia is used in place of the talc the liquid will pass through the filter in a very short time, much faster than the U. S. P. talc process.

LEO TARTAK, PH.G.

New York, N. Y.

SOME PRACTICAL POINTERS ON TOILET SOAPS.

To the Editors:

The discussion on toilet soaps in the January BULLETIN was timely and should prove helpful to the trade. Toilet soaps are one of the most profitable lines handled by the druggist, if given care and attention. The following remarks may assist you in securing from druggists who have made a success of the soap trade a few pointers in taking care of toilet soaps (toilet soaps well taken care of are half sold!) which may help others to build up a still better soap trade.

If there is a shipment of one line of goods more than any other that it is a pleasure to open up and check off, it is toilet soaps. Before you have the cover of the first case off, you are greeted with a pleasing perfume that soon finds its way through the store, cellar, or basement where you unpack freight shipments. As you go further in unpacking the goods, and open up the original packages of one-dozen cakes, or four boxes, you get the individual odors themselves—carnation, rose, violet, or lilac, as the case may be. Then, too, the boxes and wrappers are very attractive. Manufacturers spend considerable time and money in getting up "fetching" packages and odors. But if the soaps are carelessly stored and handled they soon lose their selling qualities. You will find it a good plan to keep some of these soaps in their original packages, and store them away in a cool, dry place free from light.

Before opening up a shipment of toilet soaps it is advisable to consider the best way of disposing of the greater part of the shipment in the shortest time possible—that is, when the odors are good and the packages have not lost their attractiveness. This can be accomplished by preparing your trade a week or two in advance for a soap sale, or advertising for a soap week. But do not take out of the original packages more of the soaps than you feel reasonably sure you can sell during the sale, as the stock that is left over soon loses its attractiveness and odor. If you are using a window for a soap display, do not keep the goods there longer than three days, and have the window as cool as possible and free from direct sunlight.

It is also a good plan, when dressing a show-case with toilet soaps, to avoid filling it up with all kinds of soaps. Make the principal part of the display with a very attractive 10- or 15-cent line, and open up as few of the really expensive soaps as possible. The latter soon take up the cinnamon or clove odors from the cheaper soaps. Be sure, too, to keep the medicated products away from the others—particularly the tar and carbolic soaps.

Did you ever take a number of remnants of perfumes and mix them? As a rule the scheme is not a success, and so it is with soap perfumes—the soaps lose their individual odors if a show-case is filled with a big assortment. As there are quite a number of well-known and advertised soaps that you are called on to handle, it may be found advisable to confine your buying outside of these to a

good stock of a small assortment, rather than to a small quantity of a big assortment. A good quantity of only one line, well displayed, is more salable than the same quantity of an assorted line; it is more striking to the eye.

Many druggists leave the big sale of five-cent lines to the grocer. This is a mistake, for unless your trade is very high class, or unless you have a large prescription trade, you can buy and sell just as cheaply as the grocer, and you know more about the chemistry of soaps than he does. You will be surprised at the turnover during a year of the 5-cent business if you go after it. Boarding houses and hotels are the big users of such soaps, and usually buy a six months' supply at one time. Much the same applies to toilet paper and fly poisons. Don't let the grocer have this business. When your turnover is large, and you get quantity prices, it means more frequent buying and your stock is kept fresh.

Take care of the 5-cent lines; keep them well displayed and ticketed. The white-milled soaps, when unwrapped, soon chip, lose luster, and become unsalable. The cheaper, unwrapped, transparent glycerin soaps, on the other hand, collect dust very quickly. Keep them before your customers, but keep them clean.

F. G. KEYES.

Keyes, Manitoba.

HE BELIEVES IN MAKING THE PURCHASER OF LIQUOR TAKE HIS MEDICINE.

To the Editors:

The States have different laws regarding the sale of liquors by druggists or open saloons. However, this State (South Dakota) has local option, and when a town or township votes no license the druggist cannot sell liquors for any purpose whatever except on a prescription from a physician in the county wherein the drug store is located. Now I am unfortunate enough to be located in a small dry town without a physician. I therefore cannot sell liquors, but the way the stuff is shipped into the town is a caution! Five- and ten-gallon kegs are as common as if there were two saloons in the town. One day alone not long ago there were unloaded from the local freight train 60 gallons of whisky and brandy!

Now I have found that since this is a dry town the people will go a few miles farther to a town where they can purchase liquors to do their trading.

I wish to say that because I am unable to sell liquors it has driven customers and business from my door. I am not making this statement to create the idea that I want to be a rum-seller, but as long as liquors are official in the U. S. P., and people want them for good legitimate purposes, let there be a law that a druggist can sell them regardless of whether the town or State is voting out the saloons.

But make it an affidavit law—*i.e.*, have an affidavit for the purpose stating therein that the liquor is intended for medicinal purposes, giving the amount and kind of liquor, and declaring that the purchaser wants it for himself or his family, and have the purchaser sign and swear to this. Put a limit of one sale a day to any one person. Then when the purchaser violates his affidavit by using liquor for other purposes than specified in the affidavit, let the law get him and get him hard instead of giving the druggist the worst of the deal. I say, give the purchaser a touch of the law.

A law of this kind, along with a few convictions, would soon teach the people who want liquor that they could not do as they please with liquors bought on an affidavit, and that they would have to take the blame instead of the druggist. Such a law would soon make the selling of liquors by druggists as innocent as anything else sold in the store. While the law could be abused I do not think any druggist would go out and solicit liquor sales; but let the enforcement of the act be left to the peace officers and then see to it that they do their duty. It would not be long ere this howling about the booze-selling druggist would be a thing of the past!

Brentford, South Dakota.

H. G. RAVELING.

THAT INCOMPATIBLE PRESCRIPTION—TWO LETTERS ON THE SUBJECT.

To the Editors:

I have been interested in the following prescription printed on page 43 of the January BULLETIN:

Solution of ammonium acetate.....1 ounce.
 Spirit of nitrous ether.....4 drachms.
 Potassium iodide25 grains.
 Syrup of squill.....1 ounce.
 Syrup of tolu, enough to make....4 ounces.

Sig.: 1 drachm every two hours.

Permit me to point out that two of these ingredients are, as I have stated on previous occasions, trouble makers, and the dispenser should bear them in mind. I refer to spirit of nitrous ether and

potassium iodide. Even if the first should not be acid it will be decomposed, since three of the other ingredients in the prescription have an acid reaction—solution of ammonium acetate, syrup of squill, and syrup of tolu.

Some time ago I was called upon to dispense practically the same prescription. I notified the physician of the incompatibility, explained that iodine would be set free, and suggested to him that he order spirit of ether instead of spirit of nitrous ether. This was done and the trouble was entirely overcome.

OTTO RAUBENHEIMER.

Brooklyn, N. Y.

To the Editors:

The prescription contributed by R. S. T. to page 43 of the January BULLETIN can be compounded in the following manner, and a presentable mixture, showing no trace of free iodine, will be the result:

Mix the sweet spirit of nitre and solution of ammonium acetate, and then add sufficient carbonate of ammonia to insure the solution being alkaline (a few grains will suffice). In this dissolve the potassium iodide and lastly add the syrups of squill and tolu.

The incompatibility between sweet spirit of nitre and potassium iodide or bromide can usually be overcome by neutralizing the nitrous acid in the sweet spirit of nitre with potassium bicarbonate. In this case, however, it is correct to use the ammonium salt. The nitrous acid is converted into a nitrite of the alkali.

PETER M. WILKIE.

Missoula, Montana.

HE IS ENTHUSIASTIC ABOUT STAMP-VENDING MACHINES.

To the Editors:

Let me say in reply to your letter of inquiry that I have two stamp-vending machines which I have had in operation for a little over a year. They are wonders. To begin the story (and I'll let you dig out the best of it if you desire to publish it) I had been selling about \$50 or \$60 worth of stamps a month—just about enough to keep us running for them a good part of the time. And fifty per cent of the stamp customers only came just inside the door! One trip down an eighty-foot store to get the order, another trip to the register to get the stamp, and usually still another to get change! That meant a walk of at least 150 feet in order to wait on every stamp customer.

I got hot and threatened to throw out stamps entirely. Then the Automatic Service Company came along with their proposition, and I installed two machines. Yes, I did lose a customer for about four weeks, but she was like the cat, "she came back." At first she got very warm—called the deal a swindle, etc., went to a groceryman up the street, recited her tale of woe, and then requested him to supply her with stamps. "Why," said he, "this is not the post-office. Uncle Sam pays a corps of men and has built a building just three blocks down the street where he sells stamps."

Cold comfort!

The two machines are patronized quite liberally, and they require no labor on the part of either myself or the clerks, except occasionally to show some one how to operate them. Our profit in fourteen months has been \$22.03, a like sum going to the stamp-machine company. My customers, after a little explanation, have come to see the justice in the extra charge made, and now, after a trial which I believe to be amply sufficient, I would not think of taking the machines out.

There are, I think, eighteen of the machines in operation in this city, doing a more or less lucrative business. Our returns, I am informed by the agent, are heavier than any others, and yet we are close to the post-office.

CHARLES L. MCBRIDE.

Kingston, N. Y.

A SIMPLE METHOD FOR TESTING THE COLOR OF GRANULATED SUGARS.

To the Editors:

During a talk with Professor Scoville not long ago we discussed the difference in color in granulated sugars, and the professor pointed out to me the difficulty the pharmacist or manufacturer often meets with in selecting a sugar which will make a colorless syrup. The U. S. P. does not give any test for color, only directing that the sugar must yield a colorless syrup. Therefore to know by the sugar itself what the resulting syrup will be seems really what is wanted in a test.

I happened to know a very simple method which will reveal the color of white granulated sugar in a few minutes, and Professor Scoville, after he had tried it out, urged me to publish it for the general benefit.

In the first place I will call your attention to the fact that a sugar made up of large clear crystals will make in most cases a clearer syrup than can be pro-

duced from the smaller grains. Furthermore, it seems to me that the method of manufacturing simple syrup as given in the U. S. P. offers a chance of caramelizing the small particles of sugar which may come in contact with the dry and therefore overheated surface of the dish, and it needs only a little caramel to give a tint of yellow to the syrup. May not dissolving in boiling water, and a careful removing of the scum if such develops, do just as well?

But now for the test: Put a little pile of granulated sugar, say 25 Gm., in a white porcelain evaporating dish, so that it appears as a flattened cone. Then allow from a pipette 5 Cc. of distilled water to run carefully and little by little around the base of the heap. While the water draws slowly up to the top of the pile, keep on emptying the pipette until the whole heap is soaked—always running the water around on the base. If the sugar is off color—either blue, yellow or gray—this will show in the place where the water comes ultimately together, leaving either a large dot or a ring of the peculiar color involved. A comparison of the color, which is clearly distinguishable against the white of the dish, may be made with a standard approved sample if necessary to settle any doubtful case.

L. G. LEHR.

Analytical Laboratory, Parke, Davis & Co., Detroit.

WHAT DO YOU THINK OF THIS FORMULA FOR A TOILET CREAM?

To the Editors:

During the last several months I have noticed in your valuable journal, particularly in the department of "Queries," several formulas for toilet lotions, creams, etc. While most of them differ somewhat from one another in their component parts there is nevertheless a good deal of similarity. For some time I have prepared a toilet lotion after the following formula:

Quince seed	2 ounces.
Boracic acid	1 ounce.
Rose-water	8 ounces.
Distilled extract of witch-hazel....	8 ounces.
Glycerin	8 ounces.
Alcohol	8 ounces.
Tincture of benzoin.....	1 ounce.
Oil of rose.....	20 minims.
Carbolic acid	20 minims.
Water, enough to make.....	1 gallon.

Place the quince seed in a gallon bottle, add the water and

let stand 24 hours, shaking occasionally. Strain through muslin. Dissolve the carbolic and boric acids in the glycerin with the aid of gentle heat. With this mix the tincture of benzoin, and add this mixture in several portions to the quince-seed mucilage, agitating the bottle well after each addition. Finally add the oil of rose dissolved in the alcohol, and mix the whole well.

This makes a nice, creamy, non-sticky preparation. I put it up in 3-ounce bottles and retail at 25 cents. I always wash the quince seed well before macerating.

I have found this product to be very satisfactory, and I would like to have the opinion of your readers on it. I may add that I have been a subscriber to the BULLETIN OF PHARMACY for several years, and I consider it a valuable acquisition to my library.

Milton, N. C.

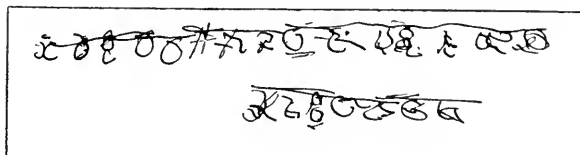
R. L. DIXON.

A PHARMACIST IN THE PANAMA CANAL SERVICE.

To the Editors:

From time to time there are sent to your magazine for publication freak notes and orders. Having received one recently that is the most complex and confusing I have ever seen, I am enclosing it. It was received from a Hindoo who could not talk English, and there was no one to act as interpreter for me. I dispensed cough syrup on a wild chance, and in a few days the man came in with the empty bottle and I refilled it for him. He bowed, smiled, and went his way.

As a druggist in the service of the Isthmian Canal



Commission, my experiences have been both varied and amusing. There are some forty-five nationalities represented here, and the demands are more varied even than the number of countries represented. One is called upon to dispense medicine to people who say that they have "A giddiness in the head and the bowels humbugging," that they have "A pain in the back and want some embrocation to anoint it."

Space will not permit me to go into much detail about my experiences. The work is pleasant and the hours short. There is a shortage of druggists in the service here, and any one who would like

some good experience, and can let liquor alone, can do well here.

Candidates should apply to the Isthmian Canal Commission, Washington, D. C., so that the applications will not be delayed or made out incorrectly.

With best wishes to the BULLETIN.

Gatun, C. Z., Panama.

"APOTHECARY."

A PUZZLER.

To the Editors:

I submit a traced copy of a prescription filled in the course of business a little while ago.

I think the first and third ingredients would puzzle some of my brother pharmacists. The first article, "Tr. ferri pomat.," is tincture of iron and

Tinct. Ferri pomat 3 1/2 fl
" Cinnamon 3 ss
" opii crocata 3 i
sh. sh. 3 times daily 10
drops

bitter apple. The third article is "Tinct. opii crocata" or tincture of opium and saffron.

Neither of these is ever used now. It is the first time I have dispensed either for years.

Beverly, Mass.

CHESTER H. KNOWLES.

SELLING THERMOMETERS.

To the Editors:

Here is a little scheme by which we sold a dozen and a half thermometers. We suspended a 25-cent thermometer by means of a white cord in the center of the front door. Just above it we had a sign reading: "Don't ask your neighbor how cold it is to-day." Underneath the thermometer we simply printed the price as follows—"25 cents." These signs were painted on the window-glass itself by the use of zinc oxide paste.

Just inside the store, on a table, we had a display of various thermometers, and there was a third collection of the goods on a show-case near the wrapping counter. During the cold weather we feature thermometers in this way, and we seldom fail to sell an interested customer a high-grade thermometer.

WALTER A. BADE.

Corvallis, Montana.

IT MAKES A DIFFERENCE WHO DOES IT!

To the Editors:

I notice that in the department of "Letters" of the January BULLETIN my friend J. C. Hagar has been complimenting you about the "General Essays" in the BULLETIN. I second his motion, but I would amend it by suggesting that you not only use ten-point type for these articles, but raise the size to twelve-point. After reading your essay entitled "Punishing the Innocent" in the January BULLETIN, and giving it a chance to settle well, I reread it. Now I would ask you to tackle this theme: "What one man can do, and is praised for it, another does and is damned for it." That's a variation of "punishing the innocent." I have heard association leaders criticize each other and they were praised for it. I have heard men of the rank and file do the same thing and get h— for it! They have been called traitors and excommunicated. Now what's the difference—can you tell me?

Chicago, Ill.

W. BODEMANN.

LET OUR READERS TELL.

To the Editors:

I submit a copy of a prescription for which I charged \$3.50. The customer said the last time he had had it filled he had paid only \$1.50:

Strychnine sulphate.....16 grains.
 Sol. arsenic chloride.....3 ounces.
 Quinine sulphate.....640 grains.
 Tr. of iron,
 Glycerin, aa.....1 pint.
 Aqua, q. s.....4 pints.

Will you please tell me how the druggist could possibly put up this prescription for that price?

Birmingham, Ala.

B. R. E. LEE.

[NOTE BY THE EDITORS.—We shall be glad to have our readers express their opinions about this price. What do you get for a half-gallon of such a mixture? We can't see how a druggist can retail such a solution on prescriptions at the rate of \$3.00 a gallon. Let us hear from you.]

To the Editors:

I congratulate you on the continued beauty and value of the BULLETIN under your editorship!

Boston, Mass.

IRVING P. FOX,
 Editor of "The Spatula."

* * *

To the Editors:

Can't do without the BULLETIN.

Rutherfordton, N. C.

W. O. WATKINS.

THE SERVICE DEPARTMENT

In this new department of the BULLETIN the market wants are indicated of those subscribers who are not able to find what they desire, and who are anxious to be put in touch with sources of supply. In some instances we have brought inquirer and manufacturer together, but in all cases it would pay other manufacturers to follow up the clues here given. We shall be glad to furnish the full name and address of any inquirer to producers or distributors who write us for this information. Readers of the journal on their part are earnestly requested to send us a description of their wants; we are anxious to make this department as valuable as possible to them all.

A Course in Optometry.

34. B. O. J. wants to take up the study of optometry by mail and is anxious to prepare himself thoroughly and properly for the fitting of glasses and other work which comes under this general head. He believes this might be made a very desirable professional side-line by the pharmacist. He wants to know what institutions are prepared to give a home course of study.

Replating Soda Spoons; Imitation Glass Labels.

35. J. P. C. & Sons would like to get in touch with some one who can replate old soda spoons and similar articles of this character which have begun to tarnish.

They also want to know where they can procure labels for shelf bottles which are in the nature of imitations of glass labels but cheaper. They think they have seen something of the kind advertised but cannot locate it.

Machinery Wanted.

36. W. Bros. Manufacturing Co. write as follows: "We are trying to secure a machine for grinding wood shavings for the making of a sweeping compound, and our object is to get in touch with manufacturers of special grinding machinery of this character. Such machinery we are informed is used by the drug manufacturers in grinding up minerals, roots, herbs, etc."

Tablet Machines.

37. The H. N. B. Co. wants to be referred to manufacturers of tablet machines. It desires to know where it can obtain the best tablet machine on the market—one that will make all sizes of tablets and in various forms.

Labels for Canned Goods and Cans Themselves.

38. H. J. M. desires to be placed in communication with manufacturers who make labels for canned goods—such labels as are used for canned corn, tomatoes, peas and the like. They would also like to be put in touch with manufacturers of cans of various kinds.

Fiber Boxes.

39. C. A. F. would like to hear from manufacturers of

boxes made from fiber or from waterproof paper of some kind.

Drawer Pulls.

40. B. F. M. wants to buy 125 drug drawer pulls. He prefers those made of oxidized copper bearing the names of drugs. He is building a new drug store, and he is also in the market for a nice awning for the front.

A Card Cost System.

41. The G. Drug Co. is anxious to establish a card cost system in its business and it does not know just where it can obtain what it wants. It would be glad to hear from manufacturers who can render advice and supply the equipment.

Book Racks.

42. B. & Son are desirous of finding out where book racks may be procured for cloth-bound and paper-back books. They are establishing a circulating library in the store and want something in which to keep the books.

A Line of Jewelry.

43. R. L. W. is in the market for a good, reliable line of jewelry, but he does not want to deal with any firm that is not entirely responsible. He assures us that fakirs need not apply.

Souvenirs for an Opening Day.

44. M. E. L. writes as follows: "I intend to open a new drug store in the future and I would like to be put in touch with concerns which make a specialty of selling premiums or souvenirs for opening and anniversary days. I have thought of match safes, calendars, and other things, but most of these have been worked overtime, and in fact it is pretty hard to pick up anything that is novel at a reasonable price."

A Special Container for a Pile Remedy.

45. T. C. writes as follows: "Could you tell me where I could get those hard-rubber tubes that screw onto collapsible tubes, to be used in connection with a pile remedy? The hard-rubber tubes are about one inch and a half long and are screwed onto collapsible tubes; the former is inserted into the rectum and then one gently presses on the collapsible tube and the salve comes out of the sides of the hard-rubber tube. If you know where they are made kindly let me know and oblige."

Advertising Service Wanted.

46. G. S. S. writes: "Can you put me in communication with concerns which prepare advertising matter for druggists—ads. which may be used in the daily papers?"

Manufacturers and Dealers in Castor Oil.

47. The A. H. R. Co. would like to hear from the principal manufacturers and dealers in castor oil in the American market.

Tieman's Soluble Blue.

48. T. J. M. is very desirous of knowing where Tieman's Soluble Blue is made. He would like to be placed in communication with the factories where this or similar substances are produced.

QUERIES.

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

A Compound Laxative Elixir.

H. G. H. wants to get up a compound laxative elixir of which each fluidextract will contain:

Senna	5 grains.
Podophyllum	1 grain.
Rhubarb	2 grains.
Cascara sagrada	5 grains.
Magnesium sulphate	20 grains.
Sodium sulphate	5 grains.

H. G. H. writes: "We used fluidextracts of the first three drugs, aromatic cascara, added some licorice, and produced a mixture with a more pronounced salts and senna taste than the original product which our physician friend had in mind. He said the original had very little odor and only a slight licorice taste, and that the taste of the product did not remain long in the mouth. Can you suggest a good working formula? I might add that the physician wants to get the product at \$2.75 an imperial gallon. By using a good quality of fluidextracts, however, we are unable to meet this figure."

Our friend will readily appreciate the fact that to match a flavor or appearance from a description is a most difficult matter, even though the description be clear and lucid, as in this case. We would certainly expect that a preparation containing about 50 per cent of salts would have a very pronounced salt taste, and when the other ingredients and solvents bring the volume up to three-quarters of the final amount, there isn't much room for sweetening or flavoring. Another difficulty is that of getting the podophyllum resin to remain in solution in the weakly alcoholic liquid—a consideration which seems impossible on the face of it. A strongly alcoholic fluid will precipitate the salts, and a weakly alcoholic one, with the salts in solution, will precipitate the resin.

Acids are the best disguise for salts; but they cannot be used if licorice is to be employed to cover the taste. Our correspondent does not state what form of licorice he used. Has he tried the liquid extract of licorice of the British Pharmacopœia—or some similar preparation? The more licorice you can get into the mixture, the better the salts will be covered, but of course the stronger will be the licorice flavor, and this appears to be contrary to the purpose of the original preparation. It also adds to the cost, which he already has overstepped.

Our correspondent has gone at the problem in the right way. We can suggest no improvement on that. If he will now compare his product with the original preparation in specific gravity, extractive, relative precipitates with barium chloride, etc., he may get a clue to the problem. We are unable to suggest more than this.

Some Points About Greaseless Creams.

O. D. R. asks for a formula for a greaseless cream and inquires: "What would be the result if you added enough sodium carbonate to the stearic acid to make an alkaline product, then added enough to just leave it acid, then just enough to make it neutral?" Also, "How much 28-per-cent ammonia would be required to neutralize 1 ounce of stearic acid, to make stearate of ammonium?"

O. D. R. will find on another page an article which deals with this subject and includes several formulas for greaseless creams. We will refer him to this for the formulas.

A study of such formulas will show that these creams are not intended to be alkaline or neutral, but to contain a large excess of stearic acid. To this end only enough alkali is used to saponify a portion of the acid, and the rest is held as an emulsion in the mixture. An alkaline product would not be acceptable as a skin cream, since its tendency would be to roughen instead of to soften the skin. Even a neutral cream would have little if any softening effect, and it would be difficult to secure a smooth cream in a neutral form except by reducing the sodium stearate to very small proportions; this would make it of little value as an application to the skin. In these creams stearic acid takes the place of the oil and wax of the ordinary cold cream, and this is what lubricates the skin.

It (stearic acid) is more readily absorbed than are mineral or vegetable oils, hence the term "greaseless," which is not a true designation, though the products are not greasy in the way that cold cream is.

An alkaline cream would not only be roughening to the skin, but since salts throw soaps out of solution, the mixture would tend to become granular and separate.

A neutral cream would be translucent if thin enough to spread easily, and would be jelly-like instead of creamy.

An acid cream is what practically all of the formulas give, but they are not "just acid," but decidedly acid.

To neutralize 1 ounce (avoirdupois) of stearic acid will require 94 grains of 28-per-cent ammonia water, or about 104 minims.

Carbolized Solution of Iodine, N. F.

W. E. R. Co. asks: "What can we use to deodorize carbolized solution of iodine N. F. so as not to interfere with its medical properties, or is there any other similar preparation that we could use instead?"

The odor of Boulton's Solution (carbolized solution of iodine) is due mainly to the carbolic acid which it contains. There is no way of deodorizing this without interfering with its properties.

The quality of the glycerin used will have something to do with the odor of this compound. Commercial glycerin frequently contains acrolein in combination, or fatty acids which remain concealed until they are liberated by heat, or acids or oxidizing agents. In the preliminary decolorizing of the iodine solution some of these ill-smelling bodies may be liberated and so develop an unpleasant odor in the mixture. A purer glycerin would remedy this.

There is no similar preparation which can fully take the place of this. Whether a combination of decolorized tincture of iodine, phenol, glycerin, and water would have the same

or similar properties, we do not know. You might try a mixture of 9 Cc. of decolorized tincture of iodine, 5.5 Cc. of liquefied phenol, 165 Cc. of glycerin, and water enough to make 1000 Cc., and submit a sample to your physicians for trial. This will contain about the same amount of iodine as Boulton's Solution.

Red Hair-oils.

A. J. D. writes: "Please furnish me with a formula for a red hair-oil."

Here are three formulas:

Castor oil	2 ounces.
Oil of bergamot.....	120 minims.
Oil of lavender.....	30 minims.
Oil of rosemary.....	30 minims.
Oil of rose geranium.....	15 minims.
Alkanet root.....	60 grains.
Alcohol	14 ounces.

Dissolve the oils in the alcohol, add the alkanet root, digest two or three hours, and filter. The color may be deepened or lightened by adjusting the quantity of alkanet root.

Oil of benne.....	1 pint.
Cumarin	1 grain.
Oil of lemon.....	12 minims.
Oil of bergamot.....	60 minims.
Alkanet root.....	a sufficient quantity.

Dissolve the cumarin, oil of lemon, and oil of bergamot in the oil of benne, and add sufficient alkanet to give the desired color after macerating a few hours; then strain. Olive, almond, peanut, or white cottonseed oil may be used in place of oil of benne. Or, if preferred, liquid paraffin may be employed.

Cocoanut oil.....	3 ounces.
Castor oil.....	4 ounces.
Alcohol	8 ounces.
Oil of cinnamon.....	4 minims.
Oil of bitter almond.....	2 minims.
Oil of lavender.....	30 minims.
Oil of bergamot.....	90 minims.
Alkanet root.....	a sufficient quantity.

Melt the cocoanut oil and add it to the castor oil and alcohol. Warm until the liquid is clear, add the other oils and alkanet root, and macerate a few hours until the color is right; then strain.

Nail Bleaches and Nail Polishes.

O. S. asks for formulas for cuticle ice, nail bleach, nail polish in cake form, and nail polish in paste form.

"Cuticle ice" is a new term to us. Perhaps some of our readers can help us on this. We are not familiar with it.

For a nail bleach, a solution of oxalic acid in water acts well. Half an ounce of oxalic acid in 12 ounces of water is a good proportion. Hydrogen peroxide may also be used.

A nail polish may be made of any colorless polishing agent, such as chalk, infusorial earth, clay, zinc oxide, tin oxide, etc. Tin oxide is a frequent ingredient, though whether it has any advantage over other and cheaper polishing powders we do not know.

A typical combination is as follows:

Lead oxide	1 ounce.
Tin oxide.....	3 ounces.
Carmine	20 grains.

This forms a base for a powder, cake, or paste. For a cake form, make it into a stiff (somewhat crumbly) paste with mucilage of tragacanth, press into molds, and dry.

For a paste, mix with enough of a mixture of paraffin 1 part, and white petrolatum 4 parts, to give the required consistency. In the latter case a better color will be secured by employing an ammonia solution of carmine rather than

the dry carmine, and using just enough to give the required color.

As suggested before, a very satisfactory paste can be made from white infusorial earth, mixed with a little kaolin or talc, colored with carmine solution, and made into cakes with mucilage of tragacanth, or into a paste with paraffin-petrolatum. Another base for making the paste, which has some advantages in spreading, is a mixture of 1 part white wax and 3 parts cottonseed oil. This is softer and spreads a little more smoothly.

A Poor Prescription.

E. D. D. asks what should be the appearance of the following prescription as to color, and he also wants to know whether it should be filtered or dispensed with a shake label:

Morphine sulphate	1 scruple.
Zinc permanganate.....	1 grain.
Water	4 ounces.

Inject as directed every three hours.

Morphine salts and permanganate are incompatible—permanganate of potassium even has been recommended as an antidote to morphine poisoning. This prescription, from the pharmaceutical standpoint, should not be dispensed at all. Since pharmaceutical considerations do not always prevail in such cases, however, it becomes necessary to dispense it as written. The permanganate will be reduced, and the result is usually a muddy-brown mixture. We would advise not filtering it, but dispensing it as a shake mixture.

Lilac Toilet Water.

M. P. D. Co. writes: "Please publish a formula for a lilac toilet water."

The following formula was published by W. L. Scoville about eight years ago:

Oil of bergamot.....	3jss.
Oil of lemon.....	5vj.
Terpineol	3iv.
Oil of orange.....	3ij.
Oil of rosemary.....	3ij.
Tincture Siam benzoin.....	3ij.
Water	3xij.
Alcohol, to make.....	1 gallon.

Dissolve the oils and tincture in seven pints of alcohol, gradually add the water, and filter.

The Standard Formulary gives the following:

Essence of tuberose.....	5iv.
Essence of orange flowers.....	3j.
Oil of bitter almond.....	1 minim.
Tincture of civet.....	3ij.
Alcohol	Oij.
Water.....	q. s.

Dissolve the essences, oil, and tincture in the alcohol, cool to about 60° F., and gradually add water until a faint milkiness remains. Then filter.

Compound Vanilla Extract with Tonka, Vanillin, and Coumarin.

"Subscriber" writes: "Please supply me with a formula for vanilla extract to contain, besides vanilla beans, tonka, vanillin, and coumarin flavoring. I should like a formula which can be sold in gallon quantities to compete with the well-known brands."

Cut and grind 6 ounces of vanilla beans and 1 ounce of

tonka beans, mix well with $\frac{1}{2}$ pound of granulated sugar, and add 1 quart of alcohol, 4 ounces of glycerin, and enough water to make a gallon. Macerate two weeks, then filter and wash the filter and contents with enough water to obtain a gallon of fluid. To this add $\frac{1}{4}$ ounce of vanillin and 15 grains of coumarin, then enough compound tincture of cudbear, N. F., to obtain a rich color. Such a product should not be labeled "Extract of Vanilla," but "Extract of Vanilla and Tonka Compound," and the presence of vanillin and coumarin should be stated on the label.

Two Questions.

The C. Drug Co. writes: "Could you give us a formula for shoemaker's wax?"

"Does alcohol lessen the action of formaldehyde as a preservative when the latter is used in an embalming fluid?"

A shoemaker's wax may be made after the following formula:

Melt 40 pounds of rosin and add 4 pounds of rosin oil and 4 pounds of coal-tar oil. Boil the mixture until a portion of it on cooling is plastic and dough-like, then add 2 pounds of chrome yellow and 2 pounds of prepared chalk. Mix well and cool in molds.

So far as we know alcohol does not lessen the preservative action of formaldehyde. Commercial formaldehyde solutions always contain some methyl alcohol, the proportion of which varies. For embalming or preserving purposes

alcohol itself is of much value, and is more likely to increase the formaldehyde action than lessen it.

Camphor Cream.

F. H. E. wants a formula for making camphor cream such as is used in barber shops. The following is a typical formula:

Melt $\frac{1}{2}$ ounce white wax and add $9\frac{1}{2}$ ounces of white petrolatum. When the whole is fluid remove from the heat and stir in 90 grains of camphor, 90 grains of menthol, 2 ounces of zinc oxide, and 3 ounces of boric acid. Stir until the mixture stiffens, then run through an ointment mill. If a mill is not available the zinc oxide and boric acid should be just rubbed smooth with a little of the petrolatum mixture, and the rest worked in after it has cooled.

Removing Tattoo Marks.

S. F. Pharmacy.—These are said to be removable by the application of a paste of salicylic acid and glycerin. A compress is applied over the paste, and the whole secured with sticking plaster. After about eight days the paste is taken off, the dead skin removed, and the application of the paste repeated (as a rule, three times).

Applications of cotton wadding, soaked in chloroform, and kept in place by means of a bandage, have also been recommended.



A QUARTER-CENTURY CELEBRATION.—Oscar W. Smith, manager of the New York branch of Parke, Davis & Co., gave a dinner at the Hotel Astor on the evening of February 1 to commemorate in a fitting manner the completion of twenty-five years of continuous service in the house. The guests comprised General Manager E. G. Swift and several executives from the home office in Detroit, the department chiefs in the New York office, and representatives from the branch in Baltimore over which Mr. Smith presided for several years prior to his promotion to the New York management. Dr. Jokichi Takamine, the well-known Japanese chemist, was also one of the guests and speakers. Mr. Smith was presented with several gifts from his friends in the house, and the evening was replete with interest, good humor, and pleasant congratulation.

GENERAL ESSAYS.

THE CANCER OF SUSPICION.

BY HARRY B. MASON.

What a lot of cruel suspicion there is in the world! How often are people's motives questioned! How frequently are their actions misinterpreted! How repeatedly are their reputations injured by a sort of social Vigilance Committee which acts summarily and which gives the defendants no chance to appear in the moral court at all!

Nearly everybody, as I have said in a previous essay, seems to act on the perverted and cruelly unjust assumption that people are to be deemed guilty until they have proved their innocence, and since they are given little or no chance to prove it, and are condemned and punished without a hearing, the charge of guilt is fastened on them securely. One incident that "looks bad" is usually enough to set tongues wagging: "I didn't think *he* would do that, did you? I *am* surprised. I always thought he was above such things."

The second time a seeming offense against convention or ethics or morals is committed the tongues wag still more actively, and the man's reputation already begins to hang in the balance: "Well, I declare, I *did* hope I was wrong before. He has always been such a good man. But I guess he is like all the rest. You can't trust men, anyway."

Oh! the cruelty of Dame Gossip!

And women are not the only sinners. I have seen the Cancer of Suspicion gnawing at the vitals of men quite as rapaciously. I have seen them question the honesty or the decency of their fellows with quite as much injustice.

Few things do more harm in the world than suspicion. Confidence is the basis of our financial and commercial system—every one knows that. Every one knows that financial panics and industrial depressions have largely resulted from a lack of business confidence. Destroy this and you make every business man suspicious—you make every one afraid of every one else—you pull out the supporting columns and bring the structure crashing to the ground. If it were not for arousing political feeling (a thing I have no desire to do) I would dwell somewhat on two political leaders, one in each of the great American parties, who have of late years done much to foster suspicion, destroy confidence, awaken prejudice, and undermine our national prosperity, with the result that our business interests have been seriously injured. Both disturbers are now temporarily if not permanently under a pall, and a restoration of business confidence, and consequently of industrial progress, is slowly manifesting itself as a direct result.

But I have spoken of business confidence only to pass on to the statement that social confidence is quite as essential to our well-being and happiness. The man or the woman who inserts suspicion and doubt in among the meshes of the social fabric is doing as ruinous a thing as the noisy agitator who destroys the confidence of business men in one another and in the country. Confidence and trust comprise the very warp and woof of the social as of the industrial structure, and they cannot be injured without serious results.

As for me, I prefer to believe that most people mean to do the right and the square thing. I prefer to believe that there is more good than bad in the average man or woman. Anyway it makes me happier to think so: it gives me more pleasure in the companionship of men and women if I can trust and respect them. I do not want to be constantly on my guard. I do not desire to be watching my friends and acquaintances out of the corner of my eye to see if they do not trip occasionally and perhaps fall to the ground. If they *do* fall I want to pat them on the back, tell them it was an accident, and urge them to go ahead again with courage and confidence. It is time to convict and punish them in the court of public opinion when they have been proved guilty, and they should be deemed innocent until then. This is the fundamental principle of criminal law. Why shouldn't it be the fundamental principle of social law?

I have always noticed, too, that if people know you trust them they will try hard to be worthy of it. Put them on their honor and in nine cases out of ten they will be faithful. Doubt them, and, since they have nothing to lose, they will measure down to the doubt.

Eight or ten years ago, perhaps longer, the "honor system" of conducting examinations was installed at Princeton University, and immediately the naive and inexperienced faith of the faculty was made the subject of irony and satire from one end of the country to the other. Did the professors not know what students were by this time? Did they not realize that, given a free hand, every last one of them would "crib" his way through the examination with flying colors? Where had the unsophisticated members of the faculty been living all these years that they did not have a better understanding of human nature?

But what was the result? Cheating at examinations at once stopped absolutely! If memory does not serve me falsely, only one man continued his "cribbing" practices and his fellows were so indignant at the disgrace he had brought on himself and on them that they exposed and punished him with revengeful thoroughness!

What is the secret of the marvelous success Judge "Ben" Lindsey has had in reducing juvenile crime in Denver? Simply this: that he has trusted his "boys;" that he has placed confidence in them; that he has put them on their honor. And his "boys," as boys always will with few exceptions, have responded nobly. The Henry George Junior Republic and similar institutions and movements here and there throughout the country have been conducted on the same fundamental principle, and everywhere boys have measured up to the confidence reposed in them. It has never failed to bring out their best qualities and make men of them.

Do let us be charitable. Let us banish suspicion from our minds. Let us be unwilling to believe and pass along the first bit of evil gossip we hear of people. Appearances have injured many a reputation just as circumstantial evidence has hung many a man. We cannot always know the real facts; we cannot read one's motives; we cannot usually judge accurately of circumstances that may look suspicious—so let us be lenient. Let us have faith in people; it will make us happier and it will make them better.

To indicate how deceptive appearances often are let me tell the story of a reputable citizen who left four umbrellas to be repaired. At noon he had luncheon in a restaurant,

and as he was departing he absent-mindedly started to take an umbrella from a hook near his hat.

"That's mine, sir," said a woman at the next table.

He apologized and went out. Later in the day, when he was going home in a street car with his four repaired umbrellas, the woman he had seen in the restaurant got on the car. She glanced from him to his umbrellas and said:

"I see you had a good day."

It is scarcely necessary to say that the policy of charity and trust does not at all mean that either commercial crime or social offense shall be condoned. We must uphold our private and our public standards with jealous and rigid resolution. We must punish offenders with sure and speedy determination. But let us be certain first that they *are* offenders—that's the point. Let us not go about wearing the blue glasses of Suspicion and seeing the color of guilt fastened upon everybody and everything within reach of our vision.

ADVERTISING.

THE MANUFACTURER AND HIS DISTRIBUTOR, THE DEALER.

In a recent speech delivered before the Chicago Advertising Association on the advantages of advertising in trade papers, Mr. John A. Tenney, of the firm of Hoyt & Tenney, drug and medical paper specialists, brought out the following facts:

The most vital factor in a manufacturer's success is distribution, and with few exceptions this means the retailer, but in a great many advertising campaigns he is ignored entirely. The agencies many times say: "Create the demand and the dealer will be forced to stock your goods." They have repeated this so long that the advertisers believe the dealer is a man to be forced and bullied. It is true that they may force some articles on the dealer by such methods, but they cannot force them off his shelves. Make no mistake—the dealer controls the situation in his home town and can sell your goods or keep them under the counter.

The dealer has a great deal of self-respect and does not care to make himself a tool for some manufacturer in pushing the sale of his goods without being asked for his coöperation.

Assuming that the product is right, the first step in an advertising campaign, to my mind, is to interest the dealer and make him a loyal representative, so that he will assist in creating the demand when your general advertising campaign starts.

There are three ways to reach the dealer—the trade paper, the letter, and the salesman. You will find the trade paper and the letters the less expensive and most profitable.

Dealers want to know whether the established price will give them a good profit, whether the manufacturer intends to prevent price cutting, and whether the advertising will be continuous.

You can gain his good-will through his favorite trade paper for the reason that he has confidence in it, and if he will tell your story for you to his own customers it will make your work of introducing your product very much easier.

Not only that, but your trade paper advertising will do this for you:

It will gain the dealer's good-will.

It will cut the work of your salesmen in half, and they can double their sales, as the sale is half-made before your salesmen call.

It will teach the dealers the talking points of your product and how to create the demand.

It will make dealers familiar with your name and location.

It will build up the prestige of your firm.

It will inspire confidence in your firm and your methods of doing business.

It will go behind the doors that are locked to your salesmen.

The trade paper is the logical and economical way to reach



JOHN A. TENNEY.

the retail dealer. If you have anything to tell him, talk to him straight from the shoulder in his trade paper and the returns are bound to come in.

I wish to state that I believe more advertising failures are caused each year by goods being extensively advertised before the matter of *distribution* has been properly attended to than from any other cause. These failures will be reduced when the advertising agents begin to use trade and class papers a little more, and when the prospective advertisers refuse to be blindfolded by having other minds do their thinking for them.

COLLEGE BUILDING WILL COST \$70,000.—Construction soon will begin on a large dentistry and pharmacy college building in Portland, Oregon, to cost \$70,000. This structure is to meet the rapidly growing requirements of the North Pacific College of Pharmacy and the North Pacific College of Dentistry, which institutions have already far exceeded their room capacity on Couch and Fifteenth Streets. The new college building is to have ground space of 100x100 feet and will be located at East Sixth and Oregon Streets. The college has owned for some time a half block at this point, and will have as soon as the contractors can get the work under way there, a large, modern college building on the south half of this half block.

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THE MONTH'S HISTORY.

LEGISLATIVE MATTERS.

Something like 40 State legislatures have been or yet are in session this year, and the usual grist of measures affecting pharmacy in one way or another has appeared. It would be hopeless for us even to enumerate all of them. We understand that death has been meted out to the liquor bill desired by the Michigan Retail Druggists' Association and discussed by us last month at some length. In Pennsylvania a good deal of interest has been excited by the customary form of bill which would compel all proprietary medicines and "own-make" goods to bear the full list of ingredients on the label. In California a bill has been introduced by pharmacists themselves which among other things would subject druggists to the risk of losing their registra-

tion certificates by the payment of prescription commissions to physicians—an evil which seems to be particularly rampant in San Francisco.

In both Pennsylvania and Illinois the pharmacists are still working over the drafts of pharmacy acts to be introduced. The Pennsylvania pharmacists cannot agree on the medical dispensing feature and are divided into several camps over different provisions of the measure. In Illinois the present draft provides for the graduation prerequisite, but there seems to be more or less dispute over the proposition to abandon the principle of apprentice registration in the present law. Another thing that has disturbed the dreams of the Illinois pharmacists is the recent opinion of the Attorney-General that State boards like that in pharmacy cannot keep and use their receipts. All money must be turned into the State treasury—and of course after that is done it is pretty hard to get it out again for the purpose of enforcing the law and paying board expenses.

* * *

MONEY FOR THE PROCTER MONUMENT.

A movement has now been under way for three or four years to raise a fund of \$20,000 for the purpose of erecting a monument to the memory of William Procter, Jr., on the grounds of the Smithsonian Institution in Washington. What has given life and purpose to the plan is the desire on the part of American pharmacists to have their profession recognized in this public manner at the National Capital. Professor Procter, having been the "father of American pharmacy," and having rendered so many pioneer services to the calling, is deserving of the honor, but apart from the personality of Procter himself, the movement is entitled to the support of pharmacists everywhere who love their calling and who desire to see it dignified.

At the last annual meeting of the Maryland Pharmaceutical Association it was reported by Dr. J. F. Hancock, chairman of the A. Ph. A. Committee on the Procter fund, that of the \$20,000

desired, only about \$4000 had so far been raised. Henry P. Hynson thereupon remarked that the Washington monument, erected to the memory of the immortal George, was built by money raised from the sale of policy tickets—strange as this may sound. Money for the Lee monument in Richmond, on the other hand, was secured by selling certificates of membership in the Lee Monument Association at \$5. Mr. Hynson did not favor the policy idea, of course, but he was inclined to think that if a plan could be devised of issuing stock or membership certificates in a Procter Memorial Association, the money could be raised much more quickly than by the method so far followed. If these certificates had a value, say, of \$1 each, he was inclined to think that every pharmacist might buy as many as he had members in his family.

This plan seems to us a good one. Dr. Hancock replied that some such method had already been discussed by the Memorial Committee, and that during the present year something along this line might be decided upon.

* * *

TIT FOR TAT IN ENGLAND.

In Great Britain there is far more counter-prescribing by pharmacists and dispensing by physicians than in this country. Every physician who can afford it, indeed, apparently has a dispensary with an assistant in charge of it, and there seems to be very little brotherly feeling between the two professions. Not long since the organized medical profession induced the government to undertake an investigation of the extent to which prescribing was done by the "chemists."

The inquiry was conducted by 1600 medical officers of health, who furnished particulars concerning their own districts. The report based upon the information supplied by these medical officers constituted a remarkable attack upon pharmacists. It stated that "chemists" do not know, or only imperfectly know, the diseases they treat, and that consequently their prescribing is for the most part superficial and directed only to the symptoms, and in some instances cases are referred to doctors only in time for them to give a certificate of death. Infectious diseases, such as measles, scarlet fever, whooping-cough, diphtheria, and smallpox, were stated to be frequently overlooked by chemists, and outbreaks of infectious diseases were attributed to this cause. It was alleged that children's skin diseases were

wrongly treated, and that this sometimes necessitated a prolonged absence from school.

The treatment of infants' diseases by chemists, according to this report, has some bearing on infant mortality. Phthisis and cancer in the early stages are sometimes through improper treatment aggravated, and in many cases become too advanced for effectual medical or surgical treatment afterward.

Under the circumstances it is not surprising that pharmacists were up in arms and that they promptly resolved to ask for an investigation into the conditions under which the storage, compounding, and dispensing of medicines are carried on by doctors. It seems only reasonable to expect the government will be willing to make such an inquiry out of a sense of fairness and justice, for one profession is just as culpable as the other in encroaching upon his neighbor's preserves.

* * *

VENDING LAW KNOCKED OUT.

More or less consternation has fallen upon the N. A. R. D. camp by the recent State supreme court decision in Illinois declaring the itinerant vender law unconstitutional. The court held in the first place that since there are no restrictions in Illinois on the sale of proprietary medicines, the itinerant vender could not properly be prevented from selling them. It declared in the second place that a license fee of \$100 a month was practically prohibitory, and that the effect of the statute was to give the druggists of the State a monopoly without in any way conserving the health of the public. If we remember correctly, a similar law in the west, possibly in Minnesota, was declared unconstitutional two or three years ago for the second reason now advanced in Illinois. The Illinois law has heretofore been considered a model by the N. A. R. D. people, and its duplication in other States has been urged for several years. The decision comes just when the sessions of several of the State legislatures are drawing to a close, and when similar measures are pending here and there. The problem will evidently have to be tackled from a different angle, but it seems rather late to do anything now until another year.

* * *

SATIRIZING EARLY CLOSING.

Out in Spokane, Washington, a movement has been started for the purpose of bringing about early and Sunday closing by the druggists of the city. This has evidently interested the newspapers

somewhat, and we are reproducing a cartoon which appeared recently in the Sunday edition of the *Spokesman Review* of Spokane, together with the verses which were printed under it:



Oh! father, dear father, come home with me now,
The clock in the steeple strikes ten.
You've broken the Sabbath and mother's poor heart,
And baby won't know you again!

Oh! what do we care for the sale of a sponge,
A tooth-brush, a stamp or a pill?
Our Sundays without you are awfully sad
And mother, I fear, will be ill.

The lawyers are saying there's grounds for divorce,
And I'll have a stepfather then.
So lock up the drug store each Sunday at 12,
And make us all happy again.

* * *

THE HALLBERG FUND.

A gratifying number of responses have been made to the request of the American Pharmaceutical Association that contributions be made to the Hallberg fund for the liquidation of the \$3500 mortgage on the family residence in the interest of Mrs. Hallberg and her young son Carl. The Chicago Veteran Druggists' Association, always an ardent advocate of every humanitarian movement, generously contributed \$500. The contributions from individuals have been fairly numerous, and the local committees of the A. Ph. A. are planning a systematic canvass in the interest of the fund. Everybody realizes that Professor Hallberg devoted himself with complete surrender to the welfare of American pharmacy. To such an extent was this true that he neglected his own private interests, and therefore left his family without proper protection. Under the cir-

cumstances it is only meet and proper that pharmacy should pay Professor Hallberg's family the debt which it owed to the Professor himself.

* * *

N. A. R. D. MATTERS.

The Executive Committee of the N. A. R. D., holding its regular mid-winter meeting in Chicago, seems to have tackled the work of the organization with customary vim and energy. Plans were laid for a continuation and enlargement of the regular activities, and two new features were decided upon. A free employment bureau will be established, and a "greater legal department" will be created. So far as the latter is concerned, Judge Errant will render assistance to local and State associations with reference to litigation, legislation and the like. He will also supply information regarding subjects of this kind to dues-paid individuals.

The Executive Committee likewise decided upon the inauguration of a vigorous membership campaign. The field force of organizers will not be increased for the present, but an aggressive method of going after new members by mail will be worked out by an expert and will be prosecuted with great vigor and determination. The slogan is to be 10,000 new members in 1911!

The annual meeting will be held this year at Niagara Falls. Milwaukee, Rochester, and Cedar Point were considered, but Niagara was finally selected because of its central location, desirable hotel rates on the American plan, and the offer of several desirable features gratis.

* * *

DON'T LIE ABOUT EXTRACTS!

These are bad days for flavoring extracts which are not properly labeled. In the last annual report of the Dairy and Food Commissioner of Connecticut we find mention of a large number of prosecutions where lemon, vanilla and other flavoring extracts were discovered to be out of harmony with the State law. So-called "Extract of Lemon" was variously condemned because it contained no lemon oil at all, or because the content of oil was too small, or because the product was artificially colored. "Extract of Vanilla" was deemed illegal usually because it was misbranded, preparations made of vanillin and coumarin not being properly labeled. There is no objection under most State laws to products of this kind if the titles are not misleading and dis-

honest. Among other flavoring essences falling under the ban of the law were peppermint, orange, ginger, and the like. It pays to tell the truth these days!

* * *

**WELL! WELL!
WHAT NEXT?**

Here's a brand new proposition! Down in Boston, where some of the latest ideas in public reform have been adopted, the reformers want a municipal drug store! Not long since a good old-fashioned "town meeting" was held in the City Hall for the purpose of enabling the citizens to tell the mayor and Council what they thought they ought to have. The municipal drug-store idea was advanced on the ground that the public ought to have an opportunity of getting medicines at all hours, and at the cost price—or at least as near to that figure as possible. Mayor Fitzgerald jollied the citizens along by approving the general principle involved, but declared that to establish such an institution was not within the power of the City Council. He suggested that the matter be taken up with the State Board of Pharmacy. The latter body will of course grant the request right away—yes?

* * *

**DRUG-STORE
"EXPERIENCE."**

There has been considerable difference of opinion in Pennsylvania over the interpretation of the phrase "drug-store experience." The Board of Pharmacy has been inclined to insist that this literally means experience in a real drug store and not in a hospital. The attorney-general of the State, however, has recently ruled that a candidate who had his experience in a government medical dispensary had complied sufficiently with the requirements of the law. This decision seems to us sound, as we declared editorially some months ago.

* * *

**NINE MONTHS FOR
SELLING "DOPE!"**

The Pennsylvania Board of Pharmacy, in its commendatory enforcement of the anti-cocaine law, has succeeded in putting into jail for nine months one Benjamin Ashmead, who is, startlingly enough, himself a government inspector of drugs! The testimony showed that Ashmead had been buying

cocaine for years from a large chemical house. Over 400 ounces of the stuff have been traced to him by the detectives of the Board. The jury rendered a verdict of guilty without leaving the box, and Judge Carr evidently thought that Ashmead needed a little compulsory leisure in which to think the matter over.

* * *

**COUNTER-
PRESCRIBING.**

An interesting judgment has just been rendered in Canada against a druggist. It seems that a customer asked a clerk for a bottle of a particular proprietary liniment, whereupon the clerk told him that he had something which would prove to be much more effective for the purpose. The patron purchased it, but upon using it he found that it caused him severe pain. He promptly brought suit, declaring that he suffered for two months from the effects of the liniment, and insisting that he ought to have about \$500 to make things square. In the meantime the owner of the store had died, and his heirs had become the defendants. The plaintiff won the case, but the judge reduced the damages to \$150 with costs.

* * *

**READ BEFORE
YOU SIGN.**

Every once in a while some druggist will nibble at a hold-up proposition of one kind or other. Several pharmacists in Rochester, N. Y., have recently been caught by a manufacturing concern in Ohio. They thought they were signing an order for a line of new specialties on commission, but when it was too late they discovered that they had actually signed notes which the manufacturing firm had discounted! The old injunction, "look before you leap," might well be paraphrased thus: "Read before you sign."

* * *

The Philadelphia College of Pharmacy, in addition to its regular course in commercial training, has inaugurated a special course of weekly lectures given by outside speakers. The special course was opened on March 20 by the editor of the BULLETIN OF PHARMACY, who was invited to address the second and third year men on the subject of business records.

EDITORIAL.

RESTRICTIONS ON THE PRACTICE OF PHARMACY.

Some very good people in pharmacy fear that legislative and other restrictions on the practice of the calling are becoming altogether too great in number and too intolerable in character. Liquor laws, anti-narcotic statutes, carbolic acid ordinances, pure food and drug acts, and measures of various kinds seem to be crowding one another in rapid succession. So keenly was this felt that at the Pittsburg meeting of the N. A. R. D. in September last the cry was often heard: "If this thing keeps up what freedom will be left to us? What right will remain to conduct our business as honorable men? How long will it be before nothing can be sold over our counters except on a physician's prescription?" More recently we have seen a page and a half fulmination in one of the pharmaceutical journals uttering the same cry and forecasting the day when physicians' prescriptions would be required for every petty transaction in the drug store.

We confess that we do not take quite so pessimistic a view of the outlook. It must be understood that these are days of statutory restrictions. What might be called individual liberty is being surrounded more and more by the State and Federal governments with limitations of one kind and another. More and more the interests of the individual are made to give way to the interests of the community, and a healthy type of socialism is permeating our government structure. A higher standard of morality and honesty is being demanded, and this demand is seeking expression in legislation. What the Federal government is striving to do with the trusts and the railroads is merely another form of a wide-spread movement which has for its basic inspiration a desire to give better protection to all the people.

Unfortunately such movements and such legislation have a tendency to confuse the innocent with the guilty. If a few members of any calling violate the laws of honesty, ethics or square dealing, it is too often assumed that the entire calling is guilty of the same practices and that every member of it must be so tied up with restrictions as to compel

morality in the interests of the public. The good men must therefore be surrounded with restrictions because the bad men abuse their privileges, and there is no easy way of separating the sheep from the goats. What is true of individuals is true of the different States themselves; because North Dakota or Nevada has loose divorce laws, because New Jersey has loose corporation laws, the other States are threatened with a certain loss of their independence by the demand of the "new nationalism" that greater powers be centralized in the national government in order that the weak links in the chain may be removed.

We in pharmacy will suffer no greater restrictions than are imposed upon men in every other calling, and we shall be wise if we move with the tide instead of in opposition to it. We ought not, it is true, to accept every hobble which may be placed around us; we must be alive to protect our best interests; but we must show our good faith and disarm suspicion by proving an eagerness to correct our own evils, to punish our own malefactors, and to approve of every legal restriction which may be necessary for the betterment of the community as a whole.

A MOVE TO POPULARIZE THE PHARMACOPOEIA AND EDUCATE THE PEOPLE IN STANDARDIZATION.

In reading "The Autocrat at the Breakfast Table," we were struck to run across a mention of the Pharmacopœia. So seldom is this word found in general literature! But our wonder ceased upon remembering that the author, Oliver Wendell Holmes, had been a physician and for thirty years was a professor of anatomy in the Harvard Medical School.

Why is it that the Pharmacopœia is never mentioned in lay literature? Isn't it unfortunate? Wouldn't it be better if people generally were familiar with the nature and purpose of this book? R. D. Lamie, of the Dairy and Food Department of Michigan, believes that there ought to be a concerted effort among druggists to familiarize the public with the meaning of the term "U. S. P." Every one should know what that authority stands for. It would be asking too much of the N. A. R. D. to request an appropriation of, say, \$3000 for ads. in papers like the *Saturday Evening Post* to carry on

an educational campaign. Nor would that be necessary.

What druggists can do is to have the letters "U. S. P." on the labels of packages wherever the contents permit it. Let proprietors in their individual advertising, in their circulars and newspaper announcements, have some mention of pharmacopœial standards. This is perfectly feasible. If a druggist observes the official requirements, what is to be lost in mentioning the fact? Once make this movement general and it would not be long before the Pharmacopœia would be far better known than it is now. The book would come to stand for something in the lay mind.

What is to be gained by a popularization of the Pharmacopœia? A lot. It would raise the druggist a peg or two in the esteem of the masses. It would put a stop to the habit of judging a drug store, not by the quality of the goods, but instead by the lowness of the price. A scrupulous druggist may sell an essence of peppermint containing ten per cent oil. But if his competitor chooses to prepare a seven or even a three per cent essence, there is nothing to prevent him, providing he indicates the strength on the label.

The trouble is just here. People have not been educated to read the strengths of drugs on the label. "U. S. P.," "N. F.," and percentage compositions in general are things unknown to the lay mind. What is the result? A. sells a spirit of gaultheria containing the official amount of oil, 5 per cent. B. has only 3 per cent of oil in his preparation and can therefore charge less. Obviously A. suffers by the seeming disparity of prices. All this is very unjust to the man who observes the U. S. P. requirements. A woman may pay 75 cents for a pint of vanilla extract in one store and later buy the same quantity for a half dollar from another. At once she concludes that she is getting more for her money from the second fellow. But the differences of drug strength may more than account for a disparity of 25 cents in the price of the two vanillas.

There should be some way of acquainting customers with the variable strengths of vanilla extracts. This could be accomplished by a campaign of education among the people on the subject of pharmaceutical standardization. If retail automobile agencies can talk about standardization of the parts in an automobile in their public advertisements, why can't a retail druggist proceed along

parallel lines? Let the man who sells strictly U. S. P. goods tell the people so in his advertising. The more men and women know about official standards, the better it will be for druggists who observe them.

CYANIDES OR PTOMAINES—WHICH?

There has been an alarming number of ptomaine poisonings in the past few years. Curses have been heaped upon canned goods. Cold storage has been denounced as one of the worst evils affecting humankind, and recourse has been taken to the authorities at Washington to stop the sale of decomposed products.

Hardly a day goes by that the papers fail to chronicle a case of alleged ptomaine poisoning, and of course it is usually attributed to mock turtle soup, oysters, or canned meats, and with that passed over.

Now we hear that many of these cases, instead of resulting from ptomaines, are due to our old enemy potassium cyanide. The polishes used to clean coffee-pots and other articles of silver often contain this dangerous salt. After cleaning the silverware, hotel employees are not careful to rinse each container repeatedly in fresh water before drying it, with the result that cyanide is ingested with the food. The hotel guest drinks it in his coffee. A pretty note, indeed!

While this explanation may satisfy our scientific curiosity, it is poor consolation for the bodily suffering. Fortunately, new devices are being introduced to clean silverware in which the cyanide is completely eliminated. Zinc plates do the work. Not only do they take the place of toxic agents, but they remove also the necessity of scouring the silverware. A few rinsings and all the tarnish is removed. The silverware takes on a bright luster without becoming a carrier of poison.

But what of the druggist who makes and sells a silver polish at a good profit?

AN INVITATION.

The photographs of druggists' homes reproduced in the BULLETIN lately have attracted a great deal of interest, and we should be glad to have other contributions for the series. If you have a residence that you are proud of for either its beauty or its home-like attractiveness, we should be happy to receive a picture of it.

THE HALL OF FAME.

THE SUCCESSFUL PROPRIETOR OF FOUR STORES.

The remarkable pharmacy recently established in the Hotel Astor in New York City has attracted a great deal of attention. We are showing a full-page view of it elsewhere in the present issue of the



FREDERICK K. JAMES.

BULLETIN, and a mere glance at the picture will suffice to show that this pharmacy represents the latest achievement in the perfection of drug-store art.

In the meantime it is of general interest to note that Frederick K. James, the proprietor of the Astor Pharmacy, has three other prosperous establishments in New York City. The original store, opened in 1890, is at 8th Avenue and 44th Street, and here Mr. James retains his office and keeps his headquarters. Of the other two stores one is at the corner of 46th Street and Broadway, and the second at the corner of 8th Avenue and 113th Street. In addition to these large and growing establishments, Mr. James also has a laboratory where he makes something like 300 toilet articles and household remedies, many of which are sold on the open market.

Mr. James comes honestly enough by his efficiency in the drug business. Beginning in 1883 with James A. Hart of Ossining, N. Y., he afterwards

attended the New York College of Pharmacy and was graduated from that institution as an honor man in the class of 1889. He began for himself the next year, and since then his expansion has been gradual and continuous. He is a member of the New York College of Pharmacy, the Alumni Association of the College, the New York State Pharmaceutical Association, and various other pharmaceutical societies. He is a member also of the Ancient Lodge F. & A. M., No. 724. Finding time for recreation amid so busy a life, he is an enthusiastic member of the Fox Hills Golf Club.

The new pharmacy in the Hotel Astor represents a big investment and more or less of an experiment, but there is no doubt at all that Mr. James will make of it one of his customary successes.

THREE FAIR VICE-PRESIDENTS.

A neat tribute to the interest and efficiency of the women members of the Vermont State Pharma-



MISS AGNES J. QUINLAN.

ceutical Association was paid at the last annual meeting when three of their number were elected

first, second, and third vice-presidents of the association. These three interesting officials are Miss Agnes J. Quinlan of Bennington, Mrs. A. L. Cheney



MISS ELIZABETH GREGG.



MRS. A. L. CHENEY.

of Morrisville, and Miss Elizabeth Gregg of Bennington. We have much pleasure in showing the portraits of all three, and we would gently suggest at the same time that Vermont rather has the best of any other State pharmaceutical association in the country.

ANOTHER DRUGGIST IN POLITICS.

We have had a good deal to say during the past few months about druggists in public office, and we have been very gratified to know how many representatives of the drug trade have been elected to positions of importance in the community. In



CHAS. D. JOHNSON.

the December BULLETIN we printed a portrait of Chas. D. Johnson, among many other pharmacists whose candidacies proved successful in the Novem-

ber election. We are showing Mr. Johnson's likeness again for the purpose of giving our readers a few interesting details regarding his political experiences.

Mr. Johnson was born in Blue Earth county, Minnesota, in 1859, and was educated in the public schools of Mankato in that State. In 1877 he went to Brainerd, and during the thirty-three years which have since elapsed he has been engaged in the drug business in that town. Now for Mr. Johnson's political experience: He served as postmaster four years, was a member of the State Council seven years, and during four years of the latter period was president of the Council. After these evidences of public trust and support Mr. Johnson became a candidate last fall for the State Senate and was elected. As a representative of the drug trade of Minnesota at the State Capitol he will undoubtedly be able to protect and advance its interests.

SUCCESSFUL IN POLITICS AND PHARMACY.

That politics and pharmacy make a homogeneous mixture has been proved by the subject of this sketch—Thomas W. White of Newton Upper Falls,



THOMAS W. WHITE.

Mass. And yet Mr. White is only 35 years old. He is a graduate of the Newton high school and of the Massachusetts College of Pharmacy. He entered the drug business at the age of 15 and became a proprietor at the age of 21. At the age of 28 he was made a member of the Newton Board of Aldermen, and he served in that body for five years. At the end of this period, in 1909, he was

elected a member of the State House of Representatives, and was reelected in 1910.

To give a list of the clubs and organizations to which Mr. White belongs is a rather formidable task, but we might as well begin. Here are some of them: The Massachusetts State Pharmaceutical Association, The Newton Club, the Newton Players' Club, the Middlesex Club, the Massachusetts Club, the Boston City Club, and the Oddfellows Encampment. He is a Mason, a Knight Templar, a Mystic Shriner, and several other things. Evidently Mr. White is a good fellow as well as a good druggist and a good politician. He is said to be a fluent and forceful speaker, and his capacity for wit and repartee has put him in demand as an after-dinner orator.

Yes, Mr. White is a Republican.

THE NEW STATE ANALYST IN MICHIGAN.

There have recently been some changes in the Dairy and Food Department of the State of Michigan. Commissioner Dame, himself a new



FERN L. SHANNON.

appointee of Governor Osborn, has selected Fern L. Shannon as State Analyst to have charge of the dairy and food laboratory. Mr. Shannon's training seems to have fitted him admirably for this important position. Graduating first from the high

school in Camden, Michigan, he spent one year at Hillsdale College, and then took the four-year course in pharmacy at the University of Michigan. He was graduated two years ago with the degree of B.S., and since that time has been instructor in drug and food analysis at the University. So successful was his work, and so level-headed was the young man generally, that Dr. Schlotterbeck and Dr. Stevens warmly indorsed him for State Analyst when asked to recommend an efficient candidate. We understand that Mr. Shannon is anxious to have it known that in his relations to the retail druggists of Michigan he will follow out the policy established by his predecessor, Floyd I. Robison—a policy of education and assistance rather than persecution and annoyance.

BARNUM AND BAILEY OUTDONE.

Ladies and gentlemen, we now ask that you turn the next page of this journal and permit us the pleasure of presenting to you the greatest collection of highbrows the country affords. We refer to our competitors and friends—the other pharmaceutical editors. These men represent the gray matter of pharmacy—the concentrated extract of the Cerebellum Pharmaceuticum. They may not look it, but it is only a simple fact, ladies and gentlemen, that they hold the destiny of the calling in their hands. Legislative committees in pharmacy may think they secure the passage of laws. Teachers may beguile themselves pleasantly with the assumption that they plant the seeds of education in which lies the best hope of the future. Association leaders may lay to their souls the flattering unction that they are forming pharmaceutical opinion and achieving pharmaceutical reforms. But, ladies and gentlemen, these are delusions all. The men we show on the next two pages of this journal are the real powers behind the throne—the real educators—the real leaders—the real molders of opinion—the real goods in every particular.

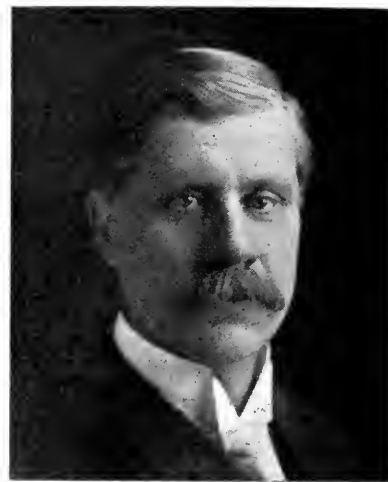
Step right this way, ladies and gentlemen. The big show is on. Positively the only appearance in public—the one and only performance. Walk right in. Admission is free. We make no charge for the greatest intellectual exhibition of the century—nay, more, the most marvelous variety of intelligence the world has ever witnessed.



Henry Kraemer, editor American Journal of Pharmacy.



J. C. Hagar, editor of The Apothecary.



G. E. Gibbard, editor Canadian Pharmaceutical Journal.



Caswell A. Mayo, editor American Druggist.



Thomas J. Keenan, associate editor American Druggist.



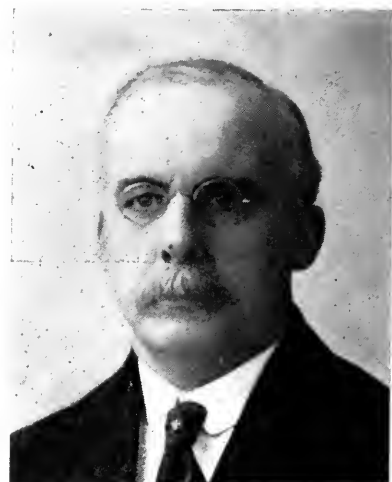
Ephraim D. Irvine, editor Western Druggist.



Francis B. Hays, editor Druggists Circular.



Hugo Kantrowitz, manager Apotheker Zeitung.



E. J. Kennedy, editor Pharmaceutical Era.

Our Jealous Rivals—May They Prosper!



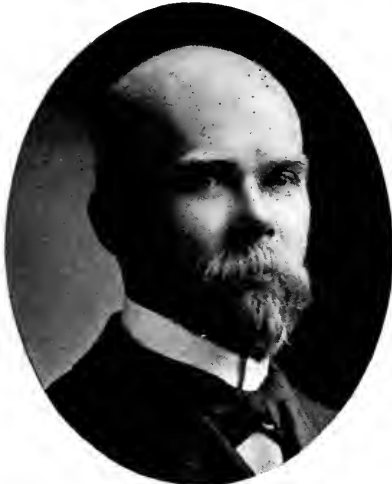
G. A. Welch, editor Northwestern Druggist.



E. G. Eberle, editor Southern Pharmaceutical Journal.



Albert Schneider, editor Pacific Pharmacist.



Henry M. Whelpley, editor Meyer Brothers Druggist.



Charles M. Carr, editor N. A. R. D. Notes.



Walter L. Lingenfelder, editor Voice of the Retail Druggist.



Charles W. Parsons, editor the Practical Druggist.



Harry B. Mason, editor Bulletin of Pharmacy.



John Helfman, assistant editor Bulletin of Pharmacy.

Our Jealous Rivals—May They Prosper!



E. H. Ladish of Chicago has a bachelor apartment on the first floor of the first building. The children belong to the neighbors.



Gus Lindvall, a familiar attendant upon meetings of the A. Ph. A., owns and occupies this residence at 1303 13th Street, Moline, Ill.



The dining-room in the home of Charles H. McConnell, 4417 Ellis Avenue, Chicago, Ill.



The parlor in the McConnell residence, elaborately done in the Venetian Renaissance style.



Residence of Charles Holzhauser, corner High and Spruce Streets, Newark, N. J., the garden of which is seen in the next picture.



Charles W. Holzhauser, a son associated in business with his father, occupies this home adjoining the parental residence.

Homes of well-known druggists.



Dr. J. O. Schlotterbeck, dean of the School of Pharmacy of the University of Michigan, 1319 Cambridge Road, Ann Arbor, Mich.



Charles H. Huhn, ex-president of the N. A. R. D. and the A. D. S., 1224 Chestnut Avenue, Minneapolis, Minn.



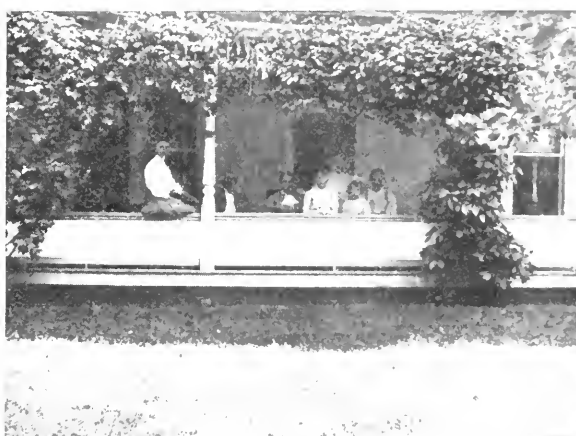
F. Cooban, Sr., member of the firm of B. S. Cooban & Co., Chicago, Ill.



Harvey I. Leith, treasurer of the N. A. R. D., 83 Niagara Street, Providence, R. I.

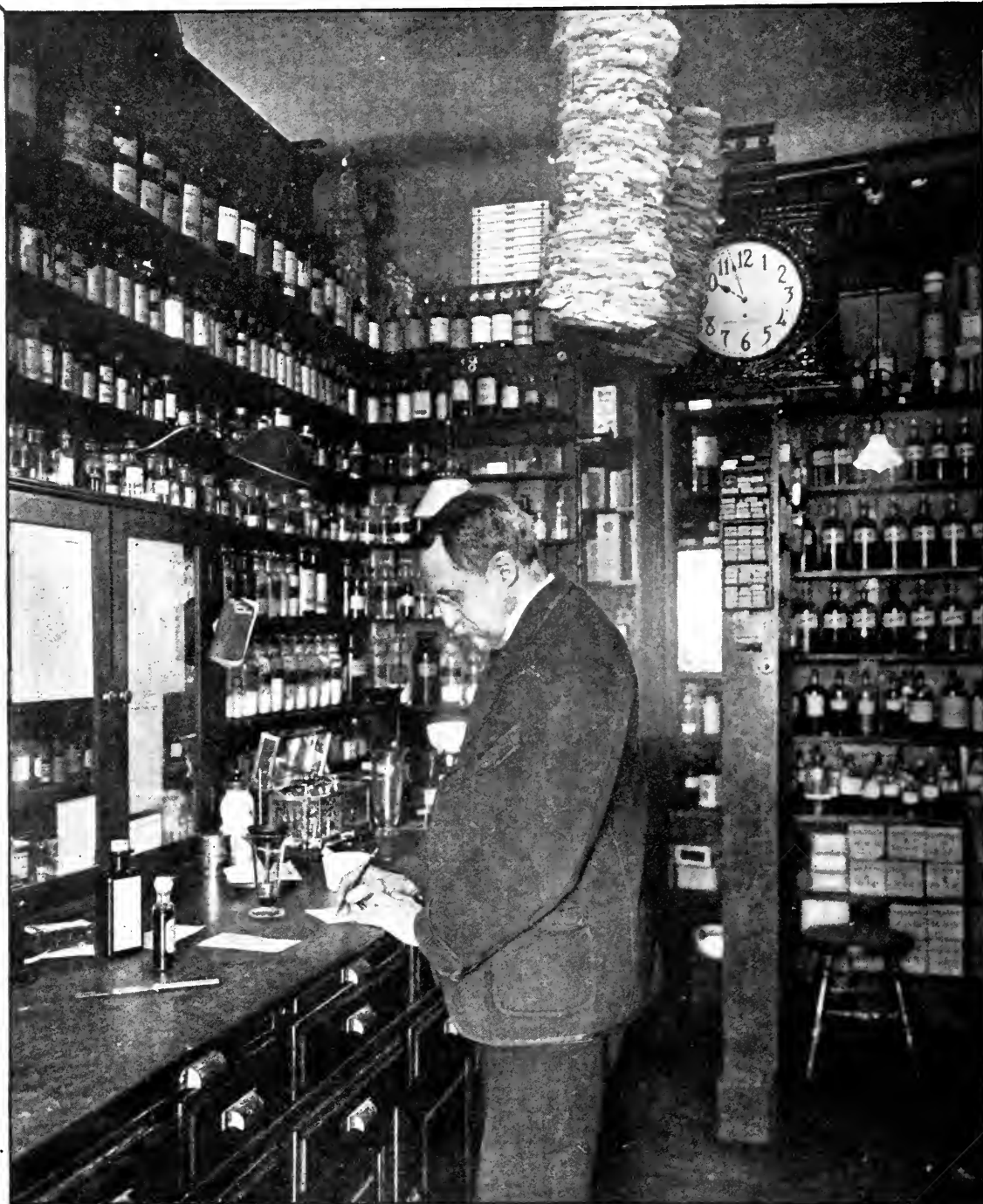


Edward A. Sayre and family group at the Sayre home, 100 Henry Street, Orange, N. J.



George C. Bartells, treasurer of the Illinois Pharmaceutical Association, Camp Point, Ill., with his family on the porch.

Homes of well-known druggists.



[Picture made especially for the BULLETIN OF PHARMACY.]

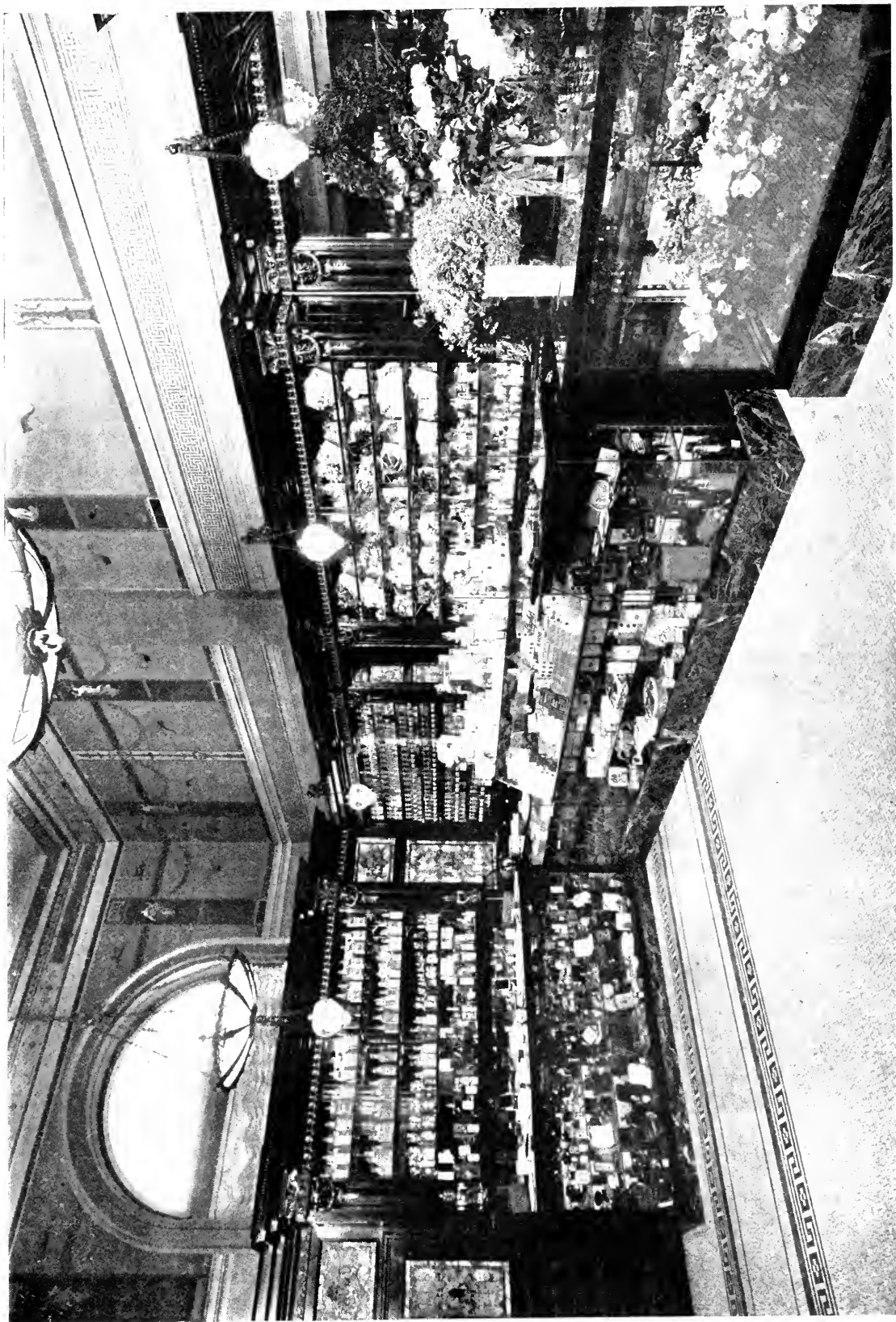
Druggists Photographed in Their Stores.

2. Dr. Clement B. Lowe, Philadelphia, Pa.



Prof. James M. Good, St. Louis, Mo.

One of the sanest, soundest, most patriotic pharmacists and best-loved teachers in the United States.



New York's Latest Contribution to Drug-store Art.

Frederick K. James's new pharmacy in the Hotel Astor is for the exclusive use of the guests of that fine hotel, and it has no street entrance whatever. The fixtures of "piano" mahogany, done in Bangs's best style, and the whole decorative scheme generally, put the place in harmony with the artistic environment of the Astor and with the famous Orangerie just across the corridor. The show-cases are all of the buffet wall style, there being no counters at all, and the display of expensive sundries and toilet articles is dazzling in the extreme. Something about Mr. James himself, of whose group of stores this is the fourth, is printed elsewhere in the "Hall of Fame" department.

HOW THEY USE THEIR WINDOWS.

Several Druggists Describe Their Methods—The Importance of Regularity in Changing the Exhibits—What Articles Make Attractive Displays—Linking Trims to Newspaper Advertising—Specific Instances of Large Sales Accomplished Through the Window.

To dwell on the value of window displays in a vague and general way is not the purpose of this symposium. Several druggists discuss the subject from their own practical view-points. Some of them cite specific instances of goods sold through this form of advertising—goods that otherwise would have remained on the shelf. Ours is a busy world and these are busy days, but every now and then some fellow hits upon a scheme that really stops the passing crowd and bids the people: "Come in." In the following contributions will be found several plans of just such drawing force. Read them.—THE EDITORS.

CHARLES W. HOLZHAUER, NEWARK, N. J.

We usually change the trim in our windows weekly, except when conditions warrant a longer period, and we always make the change on the same day if possible, having the window cleaned out on the night before and ready for the new material the



CHAS. W. HOLZHAUER.

next morning. Candy displays we never continue longer than a week, because if people constantly see the same goods in the window for a long period they will get the idea that our stock is not fresh. If a brush or sundry trim is doing well we frequently let it run several weeks, and exceptionally good and novel displays we have continued for three weeks straight.

We display in our windows only such goods as yield an adequate return, our own specialties, sundries, and occasionally a purely drug display or a fountain window. If an outside concern wishes us to make a display of their goods, and the article is a legitimate one, we will frequently make an arrangement with them, they giving us a cash consideration, or an equivalent in goods, which will at least equal the profit we would get from a similar display of our own preparations.

We often use newspaper space, calling attention to our windows, and find that it pays.

UNITY NECESSARY.

The first essential of a good window trim is *only one article at a time*. We never make a display of a dozen articles at once. The passer-by, on glancing at such a display, carries away nothing with him, but if there is only one article, and that is prominently shown, he can't possibly help but see it; and though he is not in a buying mood at the time, when he does require that article he will remember having seen it in our window. This we have seen demonstrated time and time again. People call for goods that we displayed months before. By showing only one article at a time, the impression is also created that a large business is being done in that article, particularly if you have a liberal quantity of the thing displayed.

THE WINDOW'S SELLING VALUE.

We find that window displays pay handsomely, and careful attention should be given to them, because aside from the goods that they sell, windows reflect more than anything else the character of the store. I could overload you with exact figures of

the quantity of goods we have disposed of through our windows, but one or two instances will suffice.

Every spring we make a display of sulphur and cream of tartar tablets. This will be the fourth year we have used exactly the same display. Here are the figures for 1909 and 1910:

Sold during two weeks display April, 1909, 778 10-cent boxes and 89 25-cent boxes.

Sold during two weeks display April, 1910, 1080 10-cent boxes and 168 25-cent boxes.

These figures do not include goods sold after the display was taken out of the window. The demand kept up along into the hot summer months.

GEO. A. SKELLY, MINERAL POINT, WIS.

The professional window dresser advises a change of trim about every seven days. With the average pharmacy it may not always be convenient to make the shift quite so often, although I would advise adhering as nearly as possible to this time. Of course, occasionally one is justified in extending the time of display to two weeks in case of an exceptionally fine show, but this I would consider the extreme limit. It is well to be systematic with the work. Have a regular time for the changes and follow it as closely as possible. Different stores will vary as to the most convenient days in which to conduct this branch of the store's routine, and that matter can best be adjusted by the person in charge to fit each particular case.

VARIETY MUST BE OBSERVED.

Vary the displays. Don't fall into the rut of everlastingly showing the same articles. Every pharmacy carries a sufficient line of merchandise to make an indefinite amount of trims. Be seasonable. It scarcely seems necessary to enumerate items for window displays, but for the guidance of the beginner the following suggest themselves: Paints, brushes, stationery, wall-paper, rubber goods, books, toilet articles, perfumes, fountain pens, shaving supplies, chemicals, crude drugs, etc. This merchandise is mentioned as an example, it being understood that all pharmacies do not carry all the foregoing lines. Devote a little study to this particular branch and you will soon develop the faculty of not being at a loss as to what the window will be used for next. Plan your work ahead a short time.

A most excellent opportunity is presented to the pharmacist to connect directly his newspaper display

ads. or announcements to his show window. Call the public's attention to the fact that you have a certain article on exhibit, especially if you have something good at a special figure. Feature new goods often in this manner, and thereby create in the minds of the public the impression that you are running an up-to-date store, and are continually stocking the new and late novelties.

SOME ESSENTIALS.

The essentials of a good window trim are: Avoid giving an overdrawn or crowded appearance. Don't try to display half a dozen lines at a time. Confine yourselves strictly to one. Place a sufficient amount of goods on show to make an attractive trim—that is, make it showy and yet not overdone. If the articles shown are small, arrange them in a neat and catchy shape, in squares, diamonds, etc. Line them up with a straight edge, so that they are true and symmetrical. Attention to these small details will attract the eye of the passer, and especially of women, who are admirers of neatness. Use care in selecting contrasting colors. The merchandise displayed should be in good relief, yet not in extreme contrast. Oftentimes the introduction of two or three neatly cut-out and mounted pictures will add materially to the general effect.

No mention as to finish or style of work has been made in this article, no word as to dressing the platform or the background. This is a feature that would involve the use of considerable space and time. To the amateur I would suggest the purchase of a copy of "Window Displays for Drug-gists," which will give very many valuable suggestions bearing on this subject, and is a book not to be overlooked by the professional as well.

PRICE MARKS IMPORTANT.

And now for what is considered of the utmost value in window work—the price mark. Never make a display, no matter how large or how small, that you do not plainly mark the price of the article on sale. Unless one observes this point, the trim loses a large percentage of its effect.

From a close connection with window trimming for some years past, I can say without any hesitation that the pharmacist who is overlooking or neglecting this work is sacrificing the most valuable space of his store, and letting go by default a most excellent chance of increasing his bank account. 'Tis true every pharmacy cannot support a professional trimmer; nor is that to be expected. The

average store will have some one connected with it who can devote a little time now and then to this important branch of modern pharmacy. If you have not already given this matter special attention commence in a small way; work on simple displays at first. Study shape, colors, spacing, etc., and you will be agreeably surprised at your progress.

For the benefit of the clerk of to-day let me add the following suggestion: Devote some of your spare moments to this work. You will increase your value to your employer, and if you become moderately proficient in it, it will materially improve your condition as an all-around man.

SOME DIRECT RESULTS.

In conclusion, let me call your attention to some of the *direct* results of window trimming. Some time since we bought a very liberal supply of initial stationery. This we placed on sale by making a good, showy trim. The selling price was plainly marked in two or three places. It seemed to have an almost instant effect. The ladies were much interested in the paper and a liberal sale followed.

It is surprising, too, the number of bags of horehound drops we sold after dumping a barrel of the goods in the window. The people apparently could not resist the temptation. A number of instances could be cited to show the direct selling power of the show window.

Brother pharmacists, make your trims work for you, and gain the extra revenue that you are entitled to.

H. M. CURRY, ELLSWORTH, KANS.

We change our window trim every Friday for this reason: Our newspapers being weekly issues only, are published on Thursday, reaching the majority of readers on Friday; to have clean, fresh window displays that as a rule connect with our advertisements is to put our best foot forward just at the time when the thought engendered through the advertising is fresh in their minds.

DISPLAYS TO CONFORM WITH OTHER ADVERTISING.

Having probably read the papers, if on visiting town the following day or two, people see the goods displayed, with show cards and prices that recall the ad., there is likely to be a pretty well determined desire to buy; and if the goods are right, the advertisement and price true and alluring, there usually result sales sufficiently satisfactory to make it pay.

We have had many instances where a good window display simultaneously advertised has brought immediate results, and many others wherein the results continued to augment trade in some meritorious article. We have in mind a demand for a special brand of stationery that has steadily grown for more than three years.

Our Hazel Cream is another article that grows in popularity after good displays, and is as staple as Castoria, and almost as old-fashioned; but it's honest, does the work, and holds its own alongside all the newer "fads."

THE ESSENTIALS.

We consider the essentials to good window display to be cleanliness, timeliness, unity, and well-executed show cards and price tickets. Simple color harmonies and careful attention to guard



H. M. CURRY.

against an overcrowded appearance are to be observed. As a rule, it is the article you are showing that does the work. It must impress upon the passer-by its character, its merits, and its price. The quantity of goods on display is occasionally an important matter. It impresses one with the popularity of the article, proving the advisability of large purchases on the part of the merchant who displays it, and probably leads prospective customers to think that if it's such a good thing, 'twould be well to join the chorus and go marching along.

Clean displays, often and systematically changed, grow to impress many persons who habitually pass

your windows, and they learn to look for them. Once you get people to doing this, and you have attained the superlative in window display. Your windows are working for you, and as they are maintained in their excellence, just proportionately are they a valuable asset in the business.

Don't be satisfied with good enough, keep trying to do better, and the results will surely be gratifying not only to the window dresser but to the "boss" as well, and he's the man who raises salaries.

P. HENRY UTECH, PH.G., MEADVILLE, PA.

We always aim to get up original trims, and if they happen to be something unique or unusually attractive, we let them remain from 10 to 14 days. Otherwise we change them oftener and in summer time always every week. By concentrating our efforts on one item, *i.e.*, by connecting our newspaper ads. with the window display, we have at times gotten extraordinary results. I have in mind a tooth-brush display made some months ago. We took some little pains to get up a sort of spider-web arrangement which, aside from fascinating passers-by, sold about four dozen 25-cent brushes during the first week. Nor was this all, for time and again customers when purchasing brushes at a later date would incidentally remark that they had seen such a unique tooth-brush window here several weeks ago.

PUSH YOUR OWN SPECIALTIES.

As I have repeatedly told BULLETIN readers before, it pays to feature preparations of your own manufacture. Get up preparations of merit. Get them up neatly and display them frequently and in season. Get up catchy show-cards and window strips. If it happens to be a toilet cream or a hand lotion, put out liberal quantities of samples. These cost but little and bring surprising returns.

We feature many different preparations, and on one in particular, a hair tonic, our profits exceed more than \$100 a year. I call attention to this item in particular, because it is one which the average druggist seldom undertakes to market, preferring to sell the ordinary patent nostrums at a meager profit.

NO PATENTS FOR US.

We never display patent medicines, nor do we make use of any of the made-to-order window trims of the patent-medicine concerns. There is a two-fold reason for this. In the first place, we claim to

have brains enough to create an original design or two of our own products which pay a much handsomer profit and give much more satisfactory results to our patrons. And secondly, we aim to run a first-class pharmacy, and not simply be purveyors of patent medicines, which latter cannot fail to antagonize the good-will of reputable physicians whose business we much prefer.

SPECIAL FEATURE WINDOWS.

To get the best results, we display only one item at a time in the window, arranging the trim artistically, and making liberal use of catch-cards and window strips. We fill the entire window, often



P. HENRY UTECH.

using several gross of an article if necessary to make the display effective.

Another most excellent scheme is to get up special trims, such as a house-cleaning window, in spring-time; a hot-water bottle trim, in zero weather; etc., etc. We generally get up a "sick-room" window, using such articles as bed-pans, fountain syringes, invalid rings, hot-water bottles, ice-caps, etc. We arrange a window of this kind three or four times a year and always secure excellent results from it, beside eliciting numerous inquiries from curious persons who happen to pass by.

By carrying out the suggestions herein noted I am positive every druggist will get pecuniary results. Furthermore, it is always well to remember that in the eyes of the general public a store is judged largely by the appearance of its show windows.

G. W. PFENDER, CHICAGO.

A window should be trimmed at least once every week, although there are exceptions where a trim may be left to advantage for another week, but never longer than that.

THE DAY TO TRIM.

A great deal depends on the location of the store and the nature of the goods displayed. A good time for trimming the window is on Friday; then you have a good clean display for the Sunday sight-seers and for those who do not take the time to look during the week. But the best time of the week to trim is on the day one has the most time to devote to the work, as a hastily and poorly arranged window is little better than none.

We usually display everything except patents.



G. W. PFENDER.

During the proper seasons we have our own preparations in the way of cod-liver oil and emulsions, cough mixtures, beef, iron and wine, talcum, etc. Between times we use the window for rubber goods, sponges, soaps, perfumery, stationery, etc. Once in a while a cigar display is very profitable.

TYING UP DISPLAYS WITH AD. MATTER.

Connecting a window display with a newspaper ad. is probably a very good plan in a small town where the distances are not too great for patronage and where customers have a chance of becoming more personally acquainted with the store without going too far out of their way. Distributing circulars from house to house is a better plan in the city. We have tried that with our sundry line and have had splendid sales.

The most essential parts of a good display are neatness in placing the goods. They should not be too crowded and never too many articles of a different nature. It is always better to have a few articles nicely arranged with a good background than so many that none impress themselves on the mind of the observer.

AS TO PRICE TAGS.

It is doubtful whether everything should be price-tagged or not. If there is a special inducement, then it is well to mark the goods, but if the display is of an article which may be considered more a luxury than a necessity, then the curiosity of knowing the price often brings the people into the store, and a sale can be made. If on the other hand the price were on the article and was considered too high for the observer, he would simply pass on.

Window displays do certainly pay; and the more attractive, the better the sales. We positively know that our sales on such things as tooth-brushes, combs, hair-brushes, manicuring goods, and other small articles are nearly always doubled when on display—in fact, it is so with everything, and the druggist who neglects his window is certainly making an unpardonable mistake. It is without a doubt the best and cheapest advertising any druggist can do, regardless of the dollars it takes to buy the necessary trimmings and often the time some think is wasted at it. Besides, it is certainly more satisfying to a druggist to hear people comment favorably on his windows than to hear the remark: "That fellow never has anything in his windows but a lot of patent-medicine dummies, smoking tobacco cartoons, and other junk."

HARRY S. SPONGBERG, ROCKFORD, ILL.

In our store we change the trim in the window once a week, usually on Thursday. In making our displays we try to show such goods as are liable to bring best results and the most profit. Among the practical lines displayed are drugs, drug sundries, toilet goods and preparations, soaps, paints, brushes, trusses, surgical supplies, and rubber goods. As a rule we give very little space for patent-medicine displays. Occasionally we have in our trims articles mentioned at the same time in our newspaper announcements.

The essential characteristics of a good display are clean goods, neat arrangement, good, plain show cards and price cards. I find that window displays

are one of the best advertising media possible. Certainly they are very profitable. An instance of this I noted recently. We made a soap display, and as a specialty introduced a new brand of glycerin soap which sold for five cents a box. As a result of our efforts we sold over two gross in one week, disposing also of several boxes of other soaps.

A. ARMOR, PITTSBURG, PA.

The window is the soul of your store. Improve your opportunities in that direction if you wish to make additional sales.

My windows are trimmed once a week, on Friday. The two remaining days of the week are practically holidays in our city, and for that reason the public have an opportunity to see what there is to offer and can be promptly cared for. Windows must be clean and well lighted.

I alternate my window displays, giving publicity to my own preparations first, then bring in side-lines such as stationery, cigars, confectionery, and other specialties that give me a fair margin of profit. All goods are price-marked. The idea acts as a silent salesman.

I do not advertise any cut-rate goods. I have never used any newspaper advertising, but display advertised goods; I think this a good idea. I have distributed handbills with telling effect.

In trimming my windows I make an effort to be as original as the circumstances will permit. Signs and cut-outs are arranged to give an artistic tone to the surroundings. Study to make your window attraction bring customers into your store.

My windows have sold many dollars worth of goods. A record is kept of each display and results have proved very satisfactory. Goods in their season bring the best returns.

W. E. NEBLETT, RIVERSIDE, CAL.

We make it a point to change our window trim once a week, Wednesday being the customary time. As to the class of goods to be displayed, we do not confine ourselves to any particular kind. We show all sorts of lines, but at different seasons. We never display more than one thing at a time.

We have never tried to pattern our windows after our newspaper advertisements, or *vice versa*. Both are separate and distinct, the object in the window being in no way determined by what we may happen to be pushing in the newspaper.

In my opinion the essential characteristic of a good window trim is just this: Show one thing at a time and do it in a catchy, new way. Once attract the eye of the passer-by and you have won.

Do window displays pay? To be sure. I can cite many specific examples by way of proof. Last week we exhibited a line of tablets, marked 10 cents a package. It hadn't sold before, but by making a window display we disposed of several dozen.

All told my windows pay me better than any other advertising. I can sell anything I show.

CARL C. KENNEDY, GROVE CITY, PA.

I change my window trim every week with few exceptions, and as a rule do this about the middle of the week. I select for display any goods on which I can make a reasonable profit.

The results are usually very good. I try to



CARL C. KENNEDY.

correlate the window with my newspaper advertising, often making Rexall articles the subject of both.

The essential things in a window display, in my estimation, are neatness of arrangement, not too much goods displayed, and any kind of a sign "to make people stop."

The selling value of window displays must be evident to any one who has tried them. Not long ago we had a rubber goods trim, and it practically cleaned us out of the stock.

THE PRESIDENT OF THE A. PH. A.

John G. Godding, of Boston—The Man Himself and His Business—Something, too, About the Fashionable District in which His Stores are Located.

John G. Godding, of Boston, was recently elected president of the American Pharmaceutical Association by the present system of choosing the officers by mail. Three nominations for each office are made at the annual meeting, and the voting is then done by the assistance of Uncle Sam. This throws the franchise open to the entire membership of the organization instead of restricting it to the relatively small number who are able to be present at the conventions. Mr. Godding was one of the three nominees for president, and when the votes had been



Mr. Godding.

counted it was found that he had run away with the honor. Incidentally it was quite appropriate to elect a Boston man to the position in view of the fact that the 1911 meeting will be held in that city, and Mr. Godding can therefore be installed in office in his own town. Of course he will preside, not at this convention, but at the meeting in 1912—wherever that may happen to be held.

Mr. Godding is one of the men who are long on judgment but short on talk. He doesn't say very much, but people have a habit of going to him when they want the assistance that can be rendered by good sense and unflinching integrity. It is for this

reason that Mr. Godding has so long been treasurer of the Massachusetts College of Pharmacy, and it is not without interest to say that in this capacity he



Mrs. Godding.

shares the responsibility with others of handling what is by all odds the largest endowment of any



The Godding home in Boston.

school or college of pharmacy in the United States. The Warren B. Potter fund, left to the college some years ago, amounts nearly to \$200,000,—and there



Exterior of the main Godding store at the corner of Dartmouth and Newbury Streets in Boston. This pharmacy is located right in the heart of the Back Bay District and is only a block distant from the famous Copley Square.

are two or three other funds considerably smaller in size. It might be added in this connection that Mr. Godding has been a member of the Board of Trustees of the Massachusetts College for many years, and that he was treasurer of the Boston Association of Retail Druggists until he positively refused reelection two or three years ago.

The character of Mr. Godding's business in Boston is well reflected in the character of the man himself. It is of the solid and stable order. There are two stores—one at the corner of Dartmouth

and Newbury Streets, and the other at the corner of Massachusetts Avenue and Beacon Street. The first of these was the original Godding store, and Mr. Godding has been in business on that corner for upwards of 28 years. The location is right in the very heart and center of the fashionable "Back Bay district." Copley Square is only a block distant in one direction, and Commonwealth Avenue but a block in the other. Commonwealth Avenue, be it understood, is the pride of Boston, and here are to be found the wealthiest and the elite people in the city. Copley Square, on the other hand, is occupied by the Public Library, Trinity Church, and the Art



This shows the exterior of the store formerly owned by William D. Wheeler at the corner of Beacon Street and Massachusetts Avenue, only a block distant from the Charles River where during the season the Harvard crews may be seen in training. The store was purchased by Mr. Godding three or four years ago.



Interior view of the main pharmacy, showing the store to be dignified and rich in effect, harmonizing well with the district and the character of the trade enjoyed.

Museum—the first two of these being among the most famous buildings in the country.

This store is preëminently a family pharmacy, and some of the "best people" in Boston are numbered among the patrons of the establishment. Nearly 160,000 original prescriptions—not counting "repeats"—have been dispensed in this store, and a considerable mail-order trade has been developed. The pharmacy itself, as will be gathered from one of our illustrations, is rich and dignified in effect, thus harmonizing well with the district and the character of the trade enjoyed. Mrs. Godding is of considerable assistance to her husband in the management of the store, and in particular concerns herself with the Godding line of specialties. She has charge of the advertising literature and looks after its distribution. The 1500 book accounts of

the establishment are also under her supervision. Twenty people, it may be remarked incidentally, are now required to transact the Godding business.

Mrs. Godding herself is well known as one of the small band of Boston women who caused the formation six or seven years ago of the Women's Organization of the N. A. R. D. She was secretary of the society for several years. The Boston Chapter

was the first to be created; she was elected president of it; and if we mistake not she still holds this position. At any rate, she headed the Chapter for several years. Mrs. Godding is well known personally among the membership of the N. A. R. D. and the A. Ph. A., and she and Mr. Godding are regular attendants upon the conventions of the two organizations.

USEFUL HINTS FOR THE PRESCRIPTIONIST.

Suggestions that Conduce to Elegant Dispensing—Methods of Disguising the Odor and Taste of Some Familiar Preparations—Other Observations of Value.

By JOSEPH HART,
Portland, Oregon.

Since you saw fit to publish one of my letters in your journal on Dispensing Hints (page 473, Nov., 1909), I again take this means to promulgate what I think will be of interest, and hope it may encourage others to do likewise.

Balsam of Peru blends so nicely with iodoform in ointments as to almost cover the odor of the latter.

The addition of three ounces of water to the pint of tincture of benzoin, and then filtering, will be appreciated by the ladies who buy this article for toilet purposes as this addition prevents the familiar, disagreeable gumming when the tincture is added to water.

Alcohol is very easily dehydrated by adding a little gelatin and macerating several days.

Oil of bitter almonds very effectually disguises the odor of cacao butter, thereby enhancing its value for toilet uses.

The brushing of chocolates with a soft brush give them a markedly fresh appearance.

I make fresh argyrol solutions quickly by keeping my argyrol finely ground in an amber wide-mouth bottle. When the solutions are ordered I add the required amount to the bottle containing the water, carefully pouring the argyrol so that it will not adhere to the neck of the bottle, afterward shaking the container several times, then laying it on its side. The salt will be in solution before the customer calls or desires to use it.

Sprinkle protargol on the water in the dispensing bottle and let it stand until dissolved, thereby avoid-

ing a slightly turbid solution which results when glycerin is used and obviating filtering. This holds good for weak solutions, not exceeding 5 per cent in strength.

In dispensing ointments in collapsible tubes, such as Adrenalin, Baume Analgesique, etc., you can make a very neat and easy-to-wrap package by peeling off the label from both the tube and the lid of the box, pasting a white strip of paper over the latter, and putting the prescription label with directions onto this.

By dipping weights in a concentrated aqueous solution of potassium cyanide and then washing off in clean water one obtains bright, clean weights with practically no loss of mass. The same holds true with dirty coins. It is an advertisement to hand to a lady who wears clean white gloves, nice new or clean coin for change.

To seal soluble elastic capsules, take a small piece of wire, make a loop at one end to fit over the cut end of the capsule and apply the sealing gelatin by means of the loop.

It was suggested to use soap liniment in the molds in making suppositories by fusion in the old-style molds for the purpose of keeping the suppositories from sticking. I find after using the liniment the addition of lycopodium to the molds is of a decided advantage. When the suppositories are finished, do not throw this lycopodium away as waste, but keep it for rounding pills. When the pills are finished, notice what a pretty, odorless gloss they have.

Balsam of tolu with heavy calcined magnesia is far superior for massing pills or capsules that contain such ingredients as creosote, oil of savin, etc., than pepsin which has been suggested.

The patient will appreciate the dispensing of granulated boric acid in the place of the powdered when the directions call for a definite quantity to be dissolved in a given amount of water; for the granulated does not float and is more easily soluble.

To avoid duplicating stock especially in the prescription room and when things are ordered in quantities, attach a strip label at the bottom of the original label to the effect that more is in the basement or storeroom.

The following prescription has caused some trouble for the boys with whom I have worked:

Aristol	10 grains.
Menthol	5 grains.
Eucalyptol	6 drops.
Camphor	4 grains.
Carbolated white vaselin, 1 per cent.	1 ounce.

Mix and make an ointment and put it into a tube with a long tip. Rub the aristol with a little petroleum oil, such as albolene, etc., on one end of the slab, and on the other menthol, camphor, eucalyptol, and the required amount of carbolated vaselin; then incorporate the aristol mixture gradually in the menthol-camphor solution, and you will get a perfect solution which will mix readily with the vaselin without lumping. Roll this ointment in a piece of paper so that it will fit the tube and insert the roll, leaving a little paper over the end of the tube. Press the ends firmly against the paper so that in rapidly pulling the paper out, the tube retains all the ointment. In this way one need not even soil his hands. Finally seal the tube by making two end folds.

TO PREVENT DETERIORATION IN DRUGS.

Valuable Hints Regarding the Preservation of Crude Drugs, Syrups, and Tincture of Iodine—From a Bulletin Published by the Kentucky Agricultural Experiment Station.

Most crude drugs when received by the druggist in a modern drug store are very seldom in the form in which they are packed or collected. They have passed through the hands of the drug miller and reach the druggist usually in powdered form, ready for percolation or maceration, or other form in which the drug is to be used. But there are several crude drugs handled by the druggist, which have not been ground, such as spices, rhubarb, cardamom, compressed herbs, etc.

Many crude drugs when gathered contain a large amount of moisture, varying anywhere from 5 to 80 per cent of the weight. In order to preserve them and to facilitate comminution, they must be dried, and, owing to their porous nature, are very prone to reabsorb moisture and become moldy.

HOW TO KEEP CRUDE DRUGS.

The practice of keeping crude vegetable drugs in cardboard or paper containers, or in open drawers, in drug stores, is not good practice, as a great many of them depend for their medicinal properties upon the presence of volatile principles, and when so kept, rapidly lose a considerable portion of such constituents in the hot dry atmosphere of the average drug store. Ofttimes such drugs, when kept in this

manner, are stored near a stove or radiator during the winter months, and subjected to its direct heat.

Such drugs should be placed, as soon as received, in japanned tin boxes provided with removable labels. Let them be so arranged that odorless drugs will not be kept in close proximity to those possessing strongly odoriferous principles, thus preventing contamination.

The boxes containing such drugs should be kept in a cool, dry place in the storeroom, and only a sufficient quantity taken from them and kept in the store to supply the immediate trade.

ATTACKS FROM INSECTS.

Some crude drugs are especially liable to attack from insects, and the insect that is apt to attack a particular drug will depend to a large extent on the nature of that drug, and the physical characteristics of the insect.

The insects most injurious to crude drugs are those provided with strong jaws for biting. In this class may be cited the mites, many kinds of beetles, and some insects that are injurious in the larva stage.

The mites are small, round, oval insects with eight legs, and the mouth is provided with a beak. There

are many species of the mite: some being known as sugar mites, cheese mites, etc.

Cantharides are often attacked by a mite belonging to the genera *Glyciphagus*. The presence of this pest may be known by the formation of a considerable amount of dust and broken fragments collecting at the bottom of the jar; and by careful examination small whitish objects may be seen moving about in the powder.

Prof. L. E. Sayre, of the University of Kansas, reports having found a small beetle, *Satodrepa panicea*, feeding on columbo, aconite, mustard, althea, belladonna, pokeroor, ginseng, angelica, and other drugs.

Ergot, belladonna root, musk root, powdered senna, powdered jaborandi leaves, sweet almonds, etc., are attacked by species of the same family (*Plinidæ*).

Several other drugs are attacked by some form of insects, and large quantities are damaged to such a degree as to prevent their use in pharmaceutical preparations.

Drugs liable to be infected with such insects should be treated with the vapors of carbon bisulphide, chloroform, etc. Lay them in tight boxes and set within a wad of cotton, or a sponge, saturated with the insecticide. Then close the containers tightly and allow them to stand for about twenty-four hours, until the vapors have had time to thoroughly penetrate the contents, after which expose the drugs to air until they are free from vapors.

Sunlight is also valuable to prevent the growth and destructive action of such insects.

SYRUPS.

This is one of the most troublesome classes of preparations that the druggist is afflicted with, because many of the official syrups are seldom called for, and the druggist usually finds that the stock on hand has spoiled, by becoming sour, or mold has formed in the bottle, etc., this usually occurring just when a "hurry up" prescription is received.

Consequently the making of syrups should receive the druggist's most careful attention, for while attention to details will not always prevent the spoiling of his syrups, yet it will prevent it to a great extent.

Syrups deteriorate for several reasons:

First, impure sugar used.

Second, inversion of sugar to fermentable sugar, by (a) acids being present in solvent; (b) heating too long.

Third, excess sugar used, which subsequently crystallizes out, leaving a weak syrup.

Fourth, insufficient amount of sugar used.

Fifth, contamination with molds, yeast "germs," and other fermentative bacteria.

Sixth, loss of active ingredients by (a) volatilization by heat—*e.g.*, syrup of wild cherry, etc.; (b) oxidation—*e.g.*, FeI_2 .

Seventh, discoloration caused by caramelization of sugar by acids.

These changes may be prevented to a large extent by:

First, using pure sugar and carefully adjusting the proportion of sugar to solvent.

Second, filling small bottles completely full with the hot syrup and stoppering tightly, and keeping in a cool place.

Third, by use of preservative, as specified in Pharmacopœia, as in syrup hydriodic acid, etc.

Fourth, by the use of "cold process," which prevents the formation of fermentable sugars.

Fifth, by preparing only as much syrup as can be used up quickly.

TINCTURE OF IODINE.

There is hardly a preparation in the Pharmacopœia which varies so much as this one, which is due to two causes:

First, carelessness in preparing.

Second, carelessness in storing and keeping.

The first cause needs no comment—it speaks for itself; the second cause has certain extenuating circumstances which may relieve the druggist of a certain portion of the responsibility.

Tincture of iodine, when prepared without potassium iodide, rapidly forms ethyl iodide, and hydriodic acid, with corresponding loss of free iodine, which is entirely prevented by the use of the quantity of potassium iodide directed by the U. S. P.

If exposed, it loses alcohol faster than it does iodine, becoming rapidly stronger, sometimes reaching a concentration of 200 per cent, or more, of the U. S. P. strength.

It should be kept in tightly stoppered bottles, in a cool place, and never be dispensed with cork stoppers, as iodine rapidly attacks cork.

"MY MOST EXCITING EXPERIENCE."

A Darling Boy Swallows Iodoform—A Clerk Who Saw Prison Doors Staring Him in the Face—A Customer Is Denied the Privilege of Dying in the Store.

A PSEUDO-IODOFORM POISONING.

By G. E. MANN, SARNIA, ONTARIO.

An exciting and amusing incident occurred a few days ago. I was weighing out some iodoform which a physician had ordered sent when a lady and a little boy four or five years old walked in. I left the iodoform on the scales and proceeded to wait upon her. She wanted some perfume, and it took her some time to decide upon a satisfactory one. The boy was meanwhile making himself at home, pulling over this and that, and his mother seemed to think that it was perfectly right for her pet to enjoy himself.

All at once he gave the most terrible howl, followed by more of equal intensity. Running to him we had no difficulty in learning that sonny's trouble was only due to helping himself to the iodoform and the taste had displeased him. I do not suppose he swallowed any, but his mother was of a different mind. Wetting her finger she tried some for herself, and instantly concluded from the taste that it was poison. Without even asking what it was or giving me time to explain, she grabbed up the kicking and squalling youngster, who was doing his best to turn the air blue with his yells. Then she started down the street to the doctor's. Now a woman running along a thoroughfare with a child in her arms and moaning that her darling had been poisoned was sufficient to draw a nice, big crowd. Rumor soon had it that this was the store where it was done, and so persistent was the story that I had to publish an item in the paper giving the truth. The doctor to whom she went telephoned me, whereupon I explained the situation and thus it was all smoothed over.

A NARROW ESCAPE.

By E. M. R.

It had been an unusually busy day, and it was after twelve when I slowly climbed the stairs to my room above the store. I hurriedly undressed and almost immediately dropped off to sleep. I had not been in bed very long when I was awakened by the buzzing of the night-bell. Slipping on some

clothes I went down to the door, and there stood a small girl with a prescription. I told her to come in out of the cold night air until I filled it.

In a few minutes it was finished, and after being wrapped up, away she went with it. I locked the door after her, and then went back to the prescription department to arrange the things I had used. The first object my eye fastened on was the bottle of strychnine sulphate instead of an almost harmless alkaloid which the prescription called for. I realized instantly what I had done and what the outcome would be. As soon as I could catch my breath I grabbed my hat and out I rushed in search of the girl with the prescription.

Up and down the street I ran, but neither I nor the few people I met saw anything of the girl. Disheartened, I went back to the store to wait—for what? How long I sat there virtually waiting for the authorities to come and get me, I do not know.

A knock at the door and up I jumped to let in—whom? There stood the small girl with the contents of the prescription dripping from the paper wrapper. She had let it drop and was crying for fear her mother would whip her for being careless. Thoroughly awakened I put up the prescription a second time and sent her on her way smiling and her pockets bulging with gum drops.

"All's well that ends well," of course, but when I think how different it might have turned out—whoop—'nuff said!

A SUICIDE FRUSTRATED.

By W. WHYTE, ROODEPOORT, TRANSVAAL, SOUTH AFRICA.

I will give you an exciting incident which happened to me in Glasgow some 25 years ago. One evening at dusk I was alone in the shop when a gentleman customer known to me strolled in and asked for laudanum. I supplied an ounce and a half after he had informed me it was intended for sprinkling on a poultice. Our till was rather low. On looking up after getting the change I was amazed to see the man taking the empty bottle away from his lips.

"What have you done?" I shouted. "You might have played the game and gone elsewhere instead of getting me into trouble." Thereupon he started talking, and then for the first time I noticed he had been drinking.

"Give me a dose of arsenic," he went on, "so that I may be sure of dying quickly."

"Righto," said I, "you may as well do it properly." With that I mixed an ounce of mustard with a tumbler of water. On being assured that this mixture was all arsenic and guaranteed to kill in five minutes he gulped the lot.

As soon as that was done I left the shop to look after itself and ran for a doctor. Unluckily it was not the usual hour to find one, and after trying in vain, I returned. The back room was in a nice mess. The mustard had worked all right. Then a doctor came in, and we bundled the patient off home, which was close by, where his two brothers walked him around under the doctor's supervision until he quite recovered. Of course the boss spoke about the matter after I had told him everything, but the man was well connected and the matter was dropped.

A PRETTY EUTHYMOL WINDOW.

A rather attractive display of Euthymol Girl posters was made not long ago by John Von Rohr, of Winona, Minn. There were eight of them

were used in the novel manner shown by the engraving. On the floor were a half-gross or more of the tooth paste itself. Some of this stock was



across the top of the trim, and one in the lower center made into a panel effect through the effective use of dummies. Several other Euthymol dummies

displayed in dozen-packages, while on each side of the window was seen a pile of the loose tubes. The trim attracted a good deal of attention.

DRUG-STORE SKETCHES.

THE DEMON UNLEASHED.

By ARTHUR L. BUZZELL.

"You see, you see, gentlemens, I hold here in my hand a flask; a common flask, you see, gentlemens. In it is a light amber liquid. Taste it. It is harmless."

K. Salverson, fat, flabby, fawn-eyed, stretched forth an unsteady right arm and received a shake of the head from each of us.

"You are unkind, gentlemens. You would tell me that I do not know what I am doing. I shall demonstrate on myself." And the old man took a drink from the flask.

"You see, you see, misters, it does me no harm. It is inert; like so much water. It is indeed a wonderful discovery. Now, gentlemens, I will take some of this liquid; I will take, to be definite, two and three-fourths ounces of this liquid, and I will turn it into this gallon bottle of pure rye whisky. I will shake, so, gentlemens. Now drink your heads off!"

"You first, my dear Alphonse," expostulated the postmaster.

K. Salverson shrugged his shoulders and, with a hurt air, poured into a graduate an even half-pint and quaffed the draught at a dozen big gulps.

"Now?" inquired the eager apothecary.

"Not yet," responded El Meritus, the cigar manufacturer. "We'll await with interest the verdict of the coroner's jury."

K. Salverson held out his two hands, palms upward, and spread his fingers. The muscles about his nose twitched nervously. "All right," he said, sadly.

For awhile there was silence. A Connecticut Swiss cuckoo, somewhere between the back room we were in and the bolted front door of the pharmacy, called out the hour of ten. All around was disorder, for K. Salverson lived here. A sagging, gaping curtain failed to hide wholly an ill-kept bed in one corner. Near the middle of the room stood a large sheet-iron stove which performed, on occasion, the double office of range and heater. A stock of scientific books, intermingled with racy French novels, leaned heavily against an unused basement door. Extending along the back wall was a long rough table whereon was grouped an impressive

array of bottles, graduates, funnels, test-tubes, and retorts. From the ceiling hung a smoking Rochester.

We waited developments. K. Salverson picked up a daily paper and began to read. We chatted among ourselves. At the end of five minutes K. Salverson turned to us again.

"You see, you see, gentlemens, I am not drunk," he ventured.

Dr. Hoyt stepped forward. "Let me take your pulse and temperature and then you do that over again," he said.

"It will please me to have you take the trouble," responded the always-weary old man, submitting patiently.

The test, and another, and another, proved futile. No exhilarating effects whatever could be detected.

"You see, you see, gentlemens, it will not make drunk," he said finally. "To rob liquor of its power to intoxicate without changing its physical properties: that was the problem. I have solved it."

We all crowded around and proclaimed K. Salverson a great benefactor.

"You make too much fuss, gentlemens," he remonstrated with evident gratitude. "It is no credit. I am chemist: I must work. What I find I find. I have more to show you presently. I can tie a string on a jag and let it go when I will. Some one must volunteer. But excuse me, gentlemens, if I take in your presence a lozenger. I have sore throat." Whereupon the abstracted, midnight student drew from his waistcoat pocket a little box, slid the cover, selected a round, white tablet and swallowed it. The act was natural enough, yet no word was spoken or move made until the little box had been returned to the pocket. Then we fell to discussing. K. Salverson took a seat apart and seemed to give little heed.

A storm had arisen, an unexpected event which caused some of us a trifling uneasiness, for we were without umbrellas. Through the two dingy rear windows an occasional glimpse could be caught of the angry river. A steamboat, a quarter-mile down, whistled for the landing.

Dr. Hoyt held a blazing taper to a half-burnt cigar while with separated fingers he pressed back against his lip and out of the fire zone an aggressive black mustache. The air hung heavy with an indescribable mixture of odors.

Suddenly all eyes were centered on K. Salverson. He had arisen and stood facing us, his usually pale features now sweaty, red, and radiant.

"Hip, 'Rah, Harrison!" he yelled, waving an arm awkwardly.

Ordinarily the humor of the situation would have struck home, and such an outburst would have been greeted by a chorus of laughter. But no mirth was forthcoming, save from the old man, who burst into song:

Oh, that little old red shawl,
That little old red shawl—
That little old red shawl my mother wore.
It was baggy at the knees
And its nap was full of fleas—
That little old red shawl my mother wore!

And then ensued a scene which is indelibly burnt into the memories of those present, a scene best sketched with one straight stroke. The weakly chemist passed rapidly through the advancing stages of intoxication, and in forty minutes lay still on the floor.

Dr. Hoyt let go the limp wrist and arose to his feet. "Telephone for the authorities," he commanded curtly.

We lifted all that remained of K. Salversen to a cleared place on the table. Some one went to the bed, got a pillow and placed it under his head. Some one else crossed the cooling hands on the throbbless breast. It was all we could do.

Dr. Hoyt inserted a thumb and forefinger into the left pocket of the dead man's waistcoat and drew forth a little rectangular box. On the sliding cover, in an almost illegible hand, was written "Quadruple Throat Troches." Turning the body slightly that access to the pocket on the other side of the waistcoat might be more easily attained, the doctor thrust the same thumb and forefinger into this pocket also and drew forth another little slide-cover box. We crowded close and read thereon the single word: "Releaser."

"He got the wrong box," said Dr. Hoyt, simply.

A WIZENED little man charged his wife with cruel and abusive treatment. His better half, or in this case better two-thirds, was a big, square-jawed woman with a determined eye. The judge listened to the plaintiff's recital of wrongs with interest. "Where did you meet this woman who, according to your story, has treated you so dreadfully?" his honor asked.

"Well, judge," replied the little man, making a brave attempt to glare defiantly at his wife, "I never did meet her. She just kind of overtook me."—*Argonaut*.

BOARD QUESTIONS ANSWERED.

AN ILLINOIS EXAMINATION.

MATERIA MEDICA.

(Continued from March BULLETIN.)

14. Give the official name and habitat of Ipecac.
(a) Name its active principle. (b) Explain its double medicinal action and give average doses.

Ipecacuanha. Brazil. (a) Emetine. (b) Small doses are diaphoretic and expectorant. In large doses ipecac produces nausea and vomiting. It is given in bronchitis as a sedative expectorant; in the digestive disorders of children as an emetic to empty the overloaded stomach and remove the mucus. The dose of ipecac as an expectorant is 1 grain, as an emetic 15 grains.

15. What principles are contained in wild cherry bark? How do the principles affect infusion of wild cherry?

The most important constituent of wild cherry bark is a glucoside very similar to if not identical with amygdalin, in connection with an enzyme, by the action of which in the presence of water hydrocyanic acid is freed. The infusion is properly directed to be prepared with cold water, as heat destroys the ferment and also drives off the hydrocyanic acid.

16. Name two official forms of colchicum.

Corm and seed.

17. Distinguish between iodine, iodoform, and iodoform.

Iodine is an element which takes the form of bluish-black plates having a luster and a distinctive odor. Iodoform, $C_4I_4.NH$, is tetraiodopyrrol, a grayish-brown powder without odor or taste. It is a derivative of the base pyrrol, obtained by the direct action of iodine upon the base in the presence of alcohol. Iodoform is CHI_3 , or triiodomethane, usually obtained by the action of iodine upon alcohol, in the presence of an alkali or alkali carbonate. It is a lemon-yellow powder, and has a very offensive, penetrating, persistent odor.

18. What are the official names for the following:
(a) Poke-root; (b) burdock root; (c) goulard cerate; (d) citrine ointment; (e) diphtheria antitoxin?

(a) *Phytolacca*; (b) *lappa*; (c) *ceratum plumbi*

subacetatis; (d) unguentum hydrargyri nitratis; (e) serum antidiphthericum.

19. What is menthol? (a) What is thymol?

A secondary alcohol obtained from the oil from *Mentha piperita* Linné, or other peppermint oils. Menthol crystals are colorless and smell strongly of peppermint. (a) A phenol occurring in the volatile oil of *Thymus vulgaris* Linné, and in some other volatile oils. Thymol crystals are large and colorless and have an aromatic, thyme-like odor.

20. Describe the taste of (a) sulphate of zinc; (b) chloroform; (c) strychnine; (d) dulcamara; (e) ergot.

(a) Astringent, metallic; (b) burning, sweet; (c) intensely bitter; (d) at first bitter, afterward sweetish; (e) disagreeable.

PHARMACY.

1. Give outline of the preparation of tinctures: (1) by maceration; (2) by percolation; (3) by solution. Give an example of each process.

Whenever tinctures are to be made by maceration, the Pharmacopœia directs that about three-fourths of the total menstruum be added to the powdered drugs and the mixture set aside, with occasional agitation. The length of time required for maceration varies for different drugs, from two to fourteen days, and is stated in each official formula. At the expiration of the specified time the mixture is filtered through absorbent cotton, and when the liquid has all drained off, sufficient menstruum is passed through the dregs to bring the volume up to the required measure.

Paregoric is made by maceration.

When tinctures are to be made by percolation, the Pharmacopœia directs, with very few exceptions, that the powder having been moistened with the prescribed quantity of menstruum, shall be set aside without being compressed for a period varying from three to twenty-four hours before it is packed in the percolator. Having been properly packed and saturated with menstruum, it is allowed to macerate for twenty-four hours (in a few cases forty-eight hours) before percolation is started. This preliminary treatment is intended to insure more thorough penetration of the cellular tissue by the menstruum, and has been found very effectual in furthering the extraction of the soluble principles sought.

Tincture of gentian compound is made by percolation.

The direct solution process of making tinctures

consists in dissolving the drug directly in the menstruum.

Tincture of ferric chloride is made by solution.

2. Why is tincture of arnica made by maceration and expression? (a) Why is the process of maceration sometimes preferred to percolation? (b) Why should tinctures not be made from fluidextracts?

To exhaust the drug. But it is claimed that equally perfect exhaustion of the arnica flowers can be effected by maceration and percolation. (a) It is preferred for drugs which are more than 50 per cent soluble in the menstruum because these drugs tend to clog if percolation is attempted. (b) The Pharmacopœia directs that they should be made directly from the drug in most instances. It is admitted that there is a difference in physical properties between a tincture made from the drug and one prepared from the fluidextract. There is no reason why tinctures should not be made from fluidextracts. True, there is a little precipitation, but the active principles are not thrown down. In fact, one does better to prepare a tincture from a standardized fluidextract than from the crude drug. Especially is this true of the great majority of fluidextracts which are intended for the preparation of tinctures and which have a menstruum suited to that purpose.

3. What is the distinction between extracts and fluidextracts? (a) Name two fluidextracts made with a menstruum of boiling water. (b) Name two in which acetic acid is used.

Fluidextracts are concentrated alcoholic or hydro-alcoholic solutions of vegetable principles of drugs. Extracts are permanent, soft, solid or dry preparations obtained by evaporating the percolates of the drugs. One is a fluid, the other a solid. (a) Triticum, glycyrrhiza. (b) Lobelia, nux vomica.

4. Name the important solvents used in pharmacy in the order of their value. (a) What is an excipient? (b) Name the most important ones used in making pills. (c) Why should glycerin not be used as a part of the pill excipient if the pill is to be coated with gelatin?

Water, alcohol, glycerin, ether, chloroform, and occasionally diluted acids and alkaline solutions, as well as fixed and volatile oils. (a) An adhesive or absorbent agent used in making pill mass. (b) Glucose, syrup, licorice powder, wheat flour, glycerin. (c) If small quantities of glycerin are used, they do no harm; but a large amount would tend to soften the gelatin.

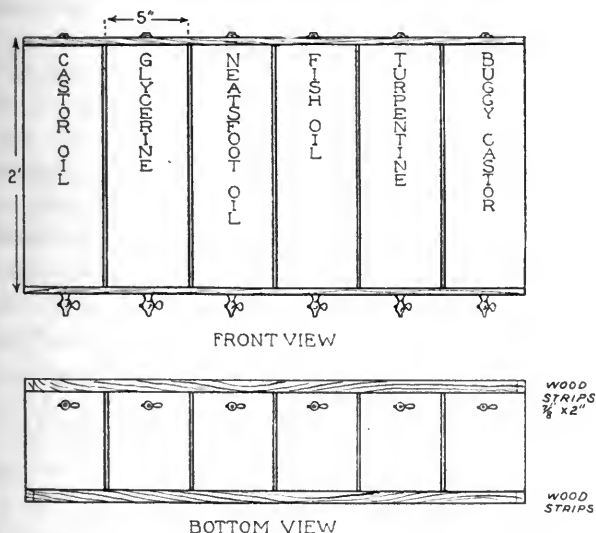
(To be continued.)

DOLLAR IDEAS.

The editor of the BULLETIN will pay \$1 in cash for every practical idea accepted for this department. What is wanted are good formulas, dispensing kinks, book-keeping suggestions, business plans, advertising schemes, new soda drinks, and everything else of a novel and useful nature.

A DISPENSING CONTAINER FOR OILS.

George W. Haines, Clarkskill, Ind.: What druggist does not remember his experience in filling bottles of castor oil or glycerin, especially during the winter season when the contents were cold? Since growing to manhood I have had the same experience which I believe every druggist or drug clerk has, especially when in haste. After trying the different cans and pumps and giving them up as impractical and inefficient, I stumbled upon



this plan and have found it most convenient for dispensing the different kinds of oils.

The device is clean. There is nothing to get out of order and it can be placed back against the wall and out of the way. Mine is made out of galvanized tin with a capacity of about six gallons, so that it need not go dry before being refilled. The cocks are of the very best brass with large holes so that the heavy liquids will flow easily. The screw-cap is large to permit the use of a large funnel.

An improvement over mine would be to place the large screw-caps on the top after the manner of large gasoline tanks and then dispense with the funnel when refilling.

Place the apparatus about five feet from the floor and against the wall, using as supports slats about $\frac{7}{8}$ by 2, instead of a wide board. This will permit one to set a lamp under the containers in the winter-time to warm them up.

"BRAN PHOSPHATE" FOR THE FOUNTAIN.

J. Weis, St. Paul, Minn.: All conscientious soda dispensers should introduce this healthful drink to their customers, and give them "Wheat Phosphates" in their natural form and not in the shape of a chemical compound. Here is the process of manufacture:

Fill a jar with a quart of clean bran and a quart of pure water, preferably hot, and let it stand over night. Then shake and strain the mixture through a cheese-cloth. Dispense the beverage with lemon juice, but do not spoil the cooling effects of the lemon by adding sugar, a body heater which causes fermentation in weak stomachs.

For a winter drink leave out the lemon. If some insist on having it sweetened, add saccharin or Hoyt's "Sweetness." This is taken from wheat itself and is just as sweet as saccharin. In this drink you also give your patrons the laxative principle of bran, called phytin. With this agent they can avoid eating the sharp-edged, nerve irritating bran chips. By a little experimenting on your part you can give your customers a very healthy drink just according to their taste and make them happy.

A FLUID FOR CLEANING UTENSILS.

R. F. Graves, Plainwell, Mich.: One feature of our business that is particularly objectionable is the cleaning up of graduates and other utensils when they have been used for substances that are not readily removed by water. A pharmacist will often guess at the quantity of some things rather than measure them out because he wants to avoid soiling the graduate with the perverse substance. Here is a cleaning mixture composed of solvents that cut most anything insoluble in water:

Acetone	10 parts.
Benzole	30 parts.
Denatured alcohol	60 parts.

I keep a bottle of this mixture at the sink, and a drachm or two of it will dissolve out any deposit that water will not affect. It doesn't cost much and will do the work almost instantly, even on dried varnish or paint.

LETTERS.

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

HERR BODEMANN AND OTHERS TO THE RESCUE.

To the Editors:

Mr. Chester H. Knowles is wrong in his interpretation of the prescription reproduced on page 126 of the March BULLETIN. "Tinct. ferri pomat." is not tincture of iron and bitter apple. It is iron dissolved in sour apple juice—and made according to various methods. I remember only too well that

*Tinct. ferri pomat 3 1/4"
" Cinnamon 3 ss
" opii extract 3 i
sh. leaf 3 times daily 10
drops*

forty-nine years ago my then preceptor made me do some research work on this product and induced me afterwards to write the subject up for Hager. This first bit of writing was the beginning of my experience in contributing to the journals, and—well, you know the result. It grew to a gruesome degree!

WILHELM BODEMANN.

Chicago, Ill.

To the Editors:

In your March issue Brother Knowles translates "tinct. ferri pomat." as tincture of iron and bitter apple. I should be pleased to have his authority for this, for I did not know that the preparation ever had bitter apple as an ingredient. While tinct. ferri pomat. may not be in general use, it has never been off the boards entirely, and a formula for it will be found on page 179 of the last edition of the N. F.

Galesburg, Ill.

C. H. BURT.

To the Editors:

Referring to the puzzle on page 126 of the March BULLETIN, do you not think the prescriber meant just what he wrote—ferrous malate instead of tinc-

ture of iron and bitter apple? This is a remedy in common use among the German doctors and is frequently combined with cinnamon water. Formulas will be found in both the National Dispensatory and the National Formulary. The European books call the product ext. ferri pomatum. In giving the patient colocynth in this instance I think he got a gizzard twister instead of a simple iron tonic!

Weston, Ohio.

E. A. SAXBY.

[NOTE BY THE EDITORS.—Since the foregoing letters were received and put in type, we had several others of the same general tenor, and we desire to thank our readers for their interest.]

NINE SUGGESTIONS.

To the Editors:

May I submit the following brief methods and ideas for the consideration of yourselves and your readers?

1. Keep postage-stamps and sell them to people who have enough humility or good breeding to ask for them in a decent manner. Don't sell them to any other kind unless you've made a contract with the government. There are times when "you are not in." Let there be times when the "stamps are out."

2. On rainy days flies will congregate in the best regulated stores. On such occasions when you have but few women shoppers use a gun and powder on the flies vigorously. If your insect powder is good and your aim accurate you can kill every fly. "Leave 'em lay" for a while and note how many people will call for "the same kind of powder as that with which you killed these flies."

3. When in doubt as to the amount called for in a prescription written in the metric system, be sensible and use metric weights and measures. Don't become an "exhorter" and try to convert one system into the other. If you haven't any metric weights and measures telegraph for them at once. "Will you order them to-day?" as the ad. writers say.

4. In preparing solutions of corrosive sublimate or other potent drugs, test your containers carefully to see that they have no breaks or leaks. The surest way to detect a flaw is to fill the bottle with water, insert the stopper and shake vigorously.

5. Never question the right of a customer to retain a copy of his prescription. If he requests a second copy at any future time give it to him without argument.

6. Don't be bulldozed. That is, don't let an aggressive, unreasonable customer make a price for

you on your own goods. Make it yourself and make it so fair and reasonable and just that it cannot be called into question by any fair-minded man.

7. If you have any grounds whatever for believing that you will get to heaven some day don't jeopardize that chance by perpetrating the following in one of your ads.: "We lead, others follow." Of course this statement will cause your professional brethren to regard you as a very exalted personage, but be sure that your assertion bears all the earmarks of truth before making it.

8. When you receive a prescription over the 'phone insist upon repeating it to the "phoner." Make him verify each ingredient, each quantity, and the directions.

9. The same rule should apply to orders received over the 'phone. Repeat the order item by item to the customer, get the correct address, and when in doubt ask if the package is to be sent C. O. D. or charged.

CRAWFORD T. RUFF.

Montgomery, Ala.

PROFESSOR REMINGTON ON CANADIAN RECIPROCITY.

Dear Mr. Bulletin:

Reciprocity is in the air, and Detroit is vitally interested.

A few weeks ago the writer found himself on a staunch little steamer—the *Cristobal Colon* on the Caribbean Sea. We had left Nueva Gerona, Isle of Pines, on New Year's eve, bound for Batabano, Cuba. The air was light, but a heavy swell caused the *Colon* to bore through the waves like an auger-bit, as the wind was on the starboard quarter.

A gray-haired Canadian, who took much pride in telling the passengers that he would be eighty-five years old on his next birthday, showed that he was a worthy scion of the Dominion and a living example of the healthfulness of his climate, by wandering all over the boat, interrupting tête-à-têtes, and bothering the deck hands by asking every few minutes, "Where are we now?"

The staterooms on the upper deck were pleasant and cool, but the partitions did not extend to the ceiling, hence a conversation in one room could be heard distinctly in several others.

The old gentleman, like all well advanced in senility, had a fashion of talking aloud to himself,

and, in fact, arguing with an imaginary person, mostly his absent wife.

The motion of the boat, together with the "mal de mer" from which many of the passengers suffered, kept nearly every one awake during the night.

Just before daylight, every one was aroused by an exciting episode which occurred in the old man's stateroom. A Chicago man, who was unfortunate enough to occupy an adjoining room, roared out: "What the — is the matter with you?" The answer came quickly: "I've lost my teeth!"

"What did you do with them?"

"That's what I don't know."

There was a creaking of the bed springs as the fat Chicago man turned in his berth, but his sleepy remark, "Well, I guess you'll find them in the morning," did not satisfy the loser of the teeth.

"I'll have to live on corn-mush until I get home," he wailed, and then came the persistent whining cry of "I've lost my teeth—mush, mush, mush."

This was repeated several times. At last a tremendous bump in the adjoining room indicated that the Chicago man was not so heartless and selfish as the denizens of the Western metropolis are sometimes reputed to be. A sharp double knock on the old man's door, and a quick turning of the key, relieved the minds of the passengers as a gruff voice asked:

"Where did you put your teeth?"

"There in that tumbler; I always take them out every night."

The sharp Chicago eyes glanced tumblerward, and their owner then declared:

"Why, old fellow, there has never been any water in that tumbler."

"Then I'm lost!" wailed Canada.

"Hol' on, hol' on, where's your vest?" demanded Chicago.

"On that nail."

"What's this?" said Chicago, and tremblingly the old man put his shaking fingers in the vest pocket, and there, wrapped in a piece of newspaper, were the missing grinders.

"Well, well! I'm saved from a corn-mush diet!" And as Chicago went out of the room we could hear him mutter: "Well, I'll be —. Some men ought to have guardians."

Now in view of the great question of the hour, Canadian Reciprocity, does this incident have any significance? Reciprocity involves exchange to mutual advantage. Our Chicago friend was not

even thanked. If we are to buy surplus Canadian wheat, will she buy surplus United States corn? For remember that at least one Canadian traveler dreaded a corn-mush diet!

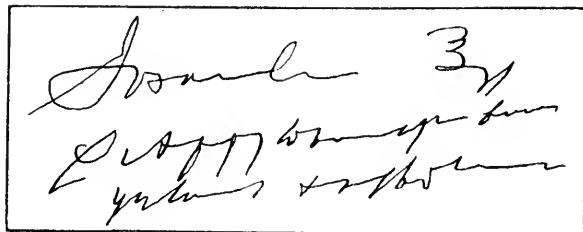
Philadelphia, Pa.

JOSEPH P. REMINGTON.

THAT PRESCRIPTION AGAIN!

To the Editors:

In glancing over the February BULLETIN I note, on page 82, a prescription that has been deciphered by Mr. Raubenheimer of Brooklyn. He thought that the prescription called for: Formalin, 56. To



me it looks more like Iosaline than Formalin, and I should furthermore say that the quantity was two ounces instead of six.

I may explain that this proprietary is manufactured in New York, and that it is often prescribed by specialists like Dr. Greenway of Hot Springs, Ark. Trusting that our "pharmaceutical cryptologist" will take no offense at my correction of his correction, I am,

JACOB S. SEGURA, PH.G.

New Iberia, La.

A CORRECTION.

In this department of the BULLETIN last month we published a very interesting communication entitled "A Simple Method for Testing the Color of Granulated Sugars." The author was L. G. Lelsz, of the Analytical Laboratory of Parke, Davis & Co. in Detroit. Unfortunately Mr. Lelsz's name, as it appeared in the journal, was printed L. G. Lehr, and we are making this correction in order to give Mr. Lelsz full credit for the contribution.

HE DROPS INTO VERSE.

To the Editors:

Your journal's name is "Bulle-tin,"
Such modesty I justly scold,
When searchingly I look within
I find not "tin" but "bully-gold."

North Paterson, N. J.

MAXWELL BUKOFZER.

THE FLORAL DEPARTMENT.

To the Editors:

Have just got settled in my new store building and have 36 feet of good show windows that I want to keep up-to-date by using the BULLETIN as a criterion. I expect something good from the displays in the journal. The BULLETIN is the best ever, and for Heaven's sake never let my subscription expire! I don't want to miss a number. Here's long life and success to the best drug journal among a lot of good ones!

W. W. STOLL.

Fontanelle, Ia.

To the Editors:

Your material in the BULLETIN is O. K. and is appreciated as much by Canadians, I think, as it is on the other side. Long may you prosper in the good work you are doing in the uplifting and elevation of Pharmacy!

K. A. MARGESON.

Vancouver, B. C.

To the Editors:

We take several pharmaceutical publications, but of them all the BULLETIN is our favorite. Its large, clear type, its practical suggestions, and its instructive editorials appeal to an old druggist of 57 years' service.

F. P. GREEN,
Green's Pharmacy.

Bellefonte, Pa.

To the Editors:

I had rather part with the enclosed "Green Dollar William" than with the companionship of the BULLETIN OF PHARMACY during 1911. Therefore enlist me in your vast army of readers.

Pittsburg, Pa.

W. E. RODEMOYER.

To the Editors:

Enclosed find money-order for \$1.00. Wouldn't be without the BULLETIN for several Bones.

Palisade, Colo.

MARK A. CUMMINGS.

To the Editors:

I take four publications, but the BULLETIN is the best of them all!

F. J. CUNNINGHAM.

Chetoka, Kans.

To the Editors:

Must have the BULLETIN above all things.

Paullina, Ia.

W. A. BLAESSER.

PRACTICAL PHARMACY.

A Discussion on Cerates and Ointments.—

At a recent meeting of the Medico-Pharmaceutical Section of the Cleveland Academy of Medicine, L. C. Hopp outlined the work thus far done by Sub-committee 12 of the U. S. P. Revision Committee with a view to securing views of the medical men present. He spoke of the proposition to drop cerates, incorporating the cerate idea in a foot-note under ointments. He suggested the advisability of framing recipes for several ointment bases—simple ointment, a wool-fat petrolatum base, a base similar to cold cream—and using these along with benzoinated lard as bases for the several official ointments instead of varying bases not official. He objected to the recognition of a 33-per-cent mercurial ointment in addition to the 50-per-cent product, raising the question as to whether, if a diluted ointment was required, the 30-per-cent ointments recommended by the Brussels Conference should not be adopted. He considered the 10-per-cent ointments of the two oxides of mercury too strong, and thought that the ointment of phenol was unsatisfactory, both as to base (petrolatum) and strength.

Dr. Corlett, the leading dermatologist of northern Ohio, outlined the history of ointments, classifying them into (a) protective, (b) astringent, (c) stimulating, (d) antiseptic, and (e) penetrative, emphasizing that these several results can be obtained only by intelligent choice of the base. Thus, while scarcely absorbable, petrolatum is an admirable base for a protective ointment, while wool-fat for such purpose would be worthless, and the conditions are exactly reversed if a penetrative ointment is desired. For astringent ointments a wool-fat petrolatum base is the best; for stimulating ointments a wool-fat lard base is indicated; while for an antiseptic ointment, a petrolatum-lard combination is suitable, the proportion of the two ingredients being dependent on the depth to which the antiseptic is to penetrate.

Dr. Corlett has tried all the modern substitutes for ointments—pastes, pencils, mulls, etc.—and has come to the conclusion that, after all, ointments are the most reliable products for skin medication.

As to the proposition to delete the 33-per-cent mercurial ointment, it was pointed out that in Ohio at least no product bearing a pharmacopœial name could be sold unless of pharmacopœial strength, and that as the 33-per-cent mercurial ointment containing petrolatum was intended solely as a non-absorbent vermin killer, while the 50-per-cent form was intended to be absorbed to obtain the constitutional effects of mercury, the two served two entirely different purposes, and each supplied a marked need.

The suggestion to drop the class of cerates, incorporating the idea as a foot-note under ointments, met with general approval, only one negative vote being cast.

A final vote recommended that both ointments of the oxides of mercury be dropped from the next Pharmacopœia, leaving the physician to prescribe strength and base.

Variable Teaspoons a Source of Danger.—

"It is highly desirable," says the *American Druggist*, "that some concerted action should be taken by doctors and druggists to do away with the domestic teaspoon as a medicine measure. Commonly understood to represent a utensil capable of holding sixty minims or one fluidrachm, the capacity of teaspoons varies to an extraordinary extent. The subject is one that has been discussed more than once in the drug press, but little has been accomplished in the direction of influencing physicians to insist upon their patients using a graduated measure, or dose glass, in taking the prescribed amount of medicine.

"Attention has been directed to the subject anew in a paper read before the Brooklyn Pharmaceutical Association by J. Leon Lascoff. The variations in the capacity of teaspoons were impressed on him after having dispensed a prescription containing one-quarter of a grain of morphine in each drachm of the mixture. After the patient had taken a few doses he called up the dispenser on the telephone to tell him of the uncomfortable symptoms that had developed, saying that he felt himself going under the influence of a sleeping draught. Mr. Lascoff suspected the teaspoon and asked to see it. Upon its being produced and measured it was found to hold 110 minims, so that the patient had taken nearly double the dose of morphine prescribed. The necessity is obvious of physicians insisting on the use of accurately marked medicine glasses or glass graduates marked in minims for the measuring of doses by their patients."

A Lot of Money Lost Here.—

E. W. Spony is responsible for the following little tale. Writing in the *American Druggist* he cites the incident by way of illustrating how a druggist may sometimes gain publicity without expense. To quote:

"In a large city a storekeeper on his way to open up his store one morning, hit upon the idea that people would be interested in the fact that he had found some money and wanted to return it to the proper owner. Forthwith he lettered a sign stating that he had found some money, and if the loser would state the amount he or she had lost and the location, so far as could be guessed, the dealer would be pleased to return it.

"During that day many persons visited the store, and many declared that they had lost various sums, ranging from 50 cents to \$50. The dealer made note of each of the losses, stating at the same time to the unfortunates that he was not the finder of their losses.

"At the close of the day he totaled up the amount said to have been lost, and came to the conclusion that \$864.39 was missing in the neighborhood or that he had been the unconscious promoter of a guessing contest. He removed the sign from his window in which he offered to return the money found, and substituted in its place one which read, '\$864.39 has been lost in the neighborhood of this store. I found 10 cents of it.' This sign elicited some good-natured humor from the regular patrons of the store."

BUSINESS HINTS.

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Readable Ad.—

W. H. Cousins, of Wichita Falls, Texas, is a man of unique individuality. He never says anything quite as anybody else would say it. One of his newspaper ads., borrowed from the *Practical Druggist*, is reproduced herewith, and

SHAKESPEARE

is on record as having said, "Throw physic to the dogs." But during the régime of this venerable rhymster applied therapeutics was in its embryonic state, the germ theory of disease was stoutly denied by the most eminent practitioners of the healing art, serum therapy was several hundred years in the future, and antiseptic surgery was unknown. A modern drug store or physician's office at the time would have been about as commonplace as an aeroplane at the battle of Marathon, and in this swift day of aerial navigation, speed craze and hobble skirts, to keep in touch with what is doing in the medical and pharmaceutical world means eternal vigilance and study that comes as regularly as rent and tax. Outside of Pharmacy, I do not know the way home, but pill making is my mission on earth, and on this subject I have coppered all the information that has been handed out.

W. H. COUSINS

Head Fiend

at That Fussy Pill Plant on Eighth St.

while it may not have brought much business it must surely have been read. And if it was read it attracted attention, and to attract attention is the first function of advertising matter.

Advertising a Sunday-closing Decision.—

The Owl Drug Co. on the Pacific coast, with a chain of 14 stores in San Francisco, Oakland, Los Angeles, Seattle, and Portland, has recently taken the decision of closing its stores on Sunday afternoon. We are reproducing an advertisement which the company inserted simultaneously in all the daily newspapers of San Francisco, Oakland and Los Angeles relative to closing all its California stores from one to six o'clock on Sunday. With a firm of large dealers like this assisting, it has been much easier for druggists in general in those particular cities to get together on a Sunday-closing agreement.

Incidentally we may say that the Owl Drug Co. has adopted

a bonus plan for the encouragement and retention of its many clerks. At the end of one year's service the bonus will amount to 1 per cent of the annual salary, at the end of

ANNOUNCEMENT

Sunday Afternoon Closing

BEGINNING Tomorrow, Sunday, January 22, 1911, The Owl Drug Co.'s Stores in San Francisco, Oakland and Los Angeles will be closed every Sunday from 1 to 6 P. M. This Sunday afternoon for recreation will be additional to the one day each week our employees have heretofore been receiving. While already extending to our employees many advantages in shorter hours and better salaries than ordinarily prevails in drug stores, this company believes that this reform in its service hours, heretofore regarded as impractical, must necessarily result in securing to the public immeasurably better service during the hours that our stores are open. Though the many patrons of this company, accustomed as they are to finding drug stores open every day, may not appreciate what this innovation means, their sense of fairness will undoubtedly convince them that the plan of closing Sunday afternoon is worthy of their indorsement. The Owl Drug Company is confident that this closing will make it possible for proprietors of smaller establishments to likewise close during the same hours. We respectfully solicit the assistance and co-operation of our patrons and the patrons of other dealers in making this new plan successful and permanent.

THE OWL DRUG CO..

two years' service 2 per cent, at the end of three years' service 3 per cent, at the end of four years' service 4 per cent, and at the end of five years' service and thereafter 5 per cent. This bonus plan does not take the place of increases in salary, but is in reality an addition thereto. Every concern, as it grows larger, finds it more and more necessary to enlist the hearty coöperation of its employees, and experience has shown that some form of profit-sharing, or reward for loyal service performed, is sure to bring excellent results.

A Letter to the Doctor on Salvarsan.—

Leonard A. Seltzer, a prominent Detroit pharmacist, has made a special study of Salvarsan, or "606," Ehrlich's new remedy for syphilis. Having mastered the process of dispensing the difficult chemical, Mr. Seltzer took pains to let the physicians know it. Here is a letter which he wrote them:

DEAR DOCTOR:

The success of "606" is in a great measure dependent upon its careful and skilful preparation.

The danger of untoward effects is largely due to the possibility of toxic oxidation products, which have a tendency to form rapidly during the process of preparation. The possibility of such toxic products can be easily conceived when the fact is taken into account that there is more metallic arsenic in one dose of Salvarsan than is contained in a full ounce of Fowler's Solution.

We have developed a technique in the preparation of "606," a feature of which is rapidity of manipulation, thus insuring against toxic action, and at the same time producing a smooth and much less painful injection.

"606" is supplied in absolutely sterile, sealed ampoules, all ready for injection. It is prepared to order and delivered at any hour to any address.

For those who wish to prepare "606" themselves, we supply Salvarsan in original packages at trade prices.

Very respectfully yours,
LEONARD A. SELTZER.

That the foregoing letter proved a bit of good, ethical advertising goes without saying.

A Druggist Who Knows How to Write an Ad.—

There is a clever druggist down in Asheville, N. C. His name is MacKay, and some of his ancestors must have emanated from Scotland. At any rate, this man knows how to write advertising matter, and to prove it we are going to print *in toto* the text of a circular which he recently issued:

This makes a suitable time for me to *confess*.

I have a hobby.

It concerns every man, woman, and child in town.

My hobby is—but wait a moment.

Suppose you are sick, or one of your family is sick.

You consult the best physician you know of and he gives you a prescription.

You have a right to take that prescription to any druggist, no matter whose name is printed on it.

You have the same right to select your druggist that you do to select your doctor.

Particular people bring their prescriptions to me, because my "hobby" is *prescription work*.

I take the same sort of pride in compounding every prescription the very best way, that an artist takes in painting the very best picture he can; the same that the conscientious doctor takes in bringing his patients back to health.

I know drugs; I know where to buy the best.

I get that kind, and I don't depend on appearances.

I use chemical tests.

Appearances are deceptive. Two phonograph records look exactly alike, but the phonograph gets a \$1,000 Melba song from one and a rag-time two-step from the other. So, with drugs, the inferior may look as good as the best.

My hobby leads me to study each prescription to make it give the right results.

There is no rule of thumb, no guessing—simply accurate, scientific work done by a man who knows and loves his profession.

If there is any surer way than this, I can't imagine what it is.

And besides—any physician who knows me will tell you—"MacKay does things right."

The best way for you to know, is for you to bring your next pre-

scription here, where such work is not regarded as a drudgery or necessary evil, or as a good chance to get a big price for something—but where it is a "hobby"—where it is looked upon as the most important service I can render to my fellow-man.

The price! I haven't said anything about price. That won't bother you for a moment. Our prices for prescriptions are as low as the quality of material and workmanship will permit, and therefore should not be unjustly compared with those carelessly compounded from drugs that are inert and of doubtful origin.

When you have a prescription, remember my hobby. Remember too that I will call for your prescriptions and deliver the medicine—

Phone me at any hour.

Cordially yours,

D. MAC N. MACKAY, Prescription Specialist,

Proprietor MACKAY'S PHARMACY,

OPPO. POSTOFFICE

Phone 556

The foregoing text was printed on the two inside pages of a small four-page circular. On the first or cover page was merely this title: "A Confession." Pretty good stuff, isn't it?

An Attractive Circular.—

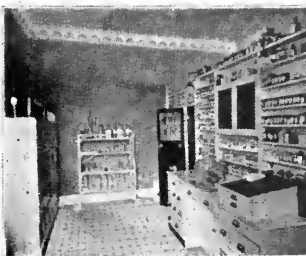
The B. F. Gallant Pharmacy, Bellevue and Downer Avenues, Milwaukee, Wis., have just gotten out a six-page folder illustrating their establishment. The three inside pages of the folder we are reproducing in the accompanying cut, and it will be seen that this piece of advertising is quite unusual in character. The service provided by the Gallant Pharmacy is evidently superior and the store itself is a beauty. The circular is entitled "The Ultra Sanitary Pharmacy." The size of the folder when open is 7½ by 12½ inches, and it folds twice. The stock is an India tint, and the cuts and text matter are printed in black and red. Altogether the thing is gotten up very artistically.

MILWAUKEE'S FINEST, MOST MODERN SANITARY DRUG STORE

MOTTO: WHAT WE OFFER FOR SALE WE GUARANTEE. IS IT THE PRICE? OR WHAT WE GET FOR THE PRICE?

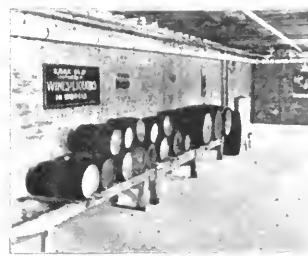


Built entirely of German silver and marble—the conditions under which we serve at this fountain are most inviting. Large handlers of fine ice creams. Orders taken and delivered for all occasions. Fountain in operation all seasons.



PRESCRIPTION DEPARTMENT

"Double-check" system used exclusively in all prescriptions compounded. Where special preparations are indicated in prescription work—these are prepared fresh in our laboratories by our own chemist—thus assuring the physician and patient of strict observance to their requirements.



For medical purposes we carry nothing but the highest grade of liquors bottled direct from barrels. Rare wines, cordials, champagne.

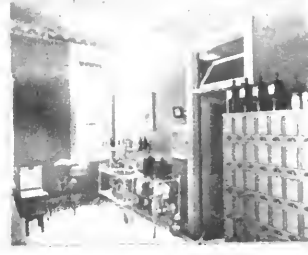


Our assortment of rare and imported toilet articles cannot be surpassed. Imported direct from world's most famous chemists. We stock room supplies of every description. We supply several hospitals. Direct importers of fine Italian and French olive oil. Imported and domestic cigars.



LABORATORY

Our laboratories are in charge of pharmacists of long experience, and every preparation is subject in practice and scientific scrutiny.



PRESCRIPTION DEPARTMENT

Inspection of prescriptions department is insured at all times to physicians and patients. No other prescriptions are compounded here. All drugs are kept and preserved from deteriorating influences which might retard their efficiency.

BOOKS.

TWO BOOKS ON THE CARE AND FEEDING OF INFANTS.

"A Treatise on Feeding and Nursing the Baby" is the title of a volume by Charles Douglas, M.D., a prominent and successful Detroit specialist in the diseases of children. The book is popular in character, is written for mothers and nurses themselves, and is filled from beginning to end with practical suggestions and advice of a thousand and one kinds. Every possible phase of the subject is discussed in simple, clear language, and mothers may turn to the book with the assurance of getting light and help on every new problem and baffling experience.

Beginning with the pregnant woman, the treatise passes on to consider childbirth, the question of nursing, the different systems of feeding suited to different infants, the care of the baby, the conditions best tending to proper development, the common diseases and their diagnosis and significance, the home treatment of ordinary difficulties and troubles, accidents and emergencies, drugs and their dosage and use, and the preparation of foods of every sort and character. Everything is described with fulness and care, and the aim of the author is to point the way for the growth of strong, healthy, well-developed children. The book contains 611 pages, is bound in cloth, and costs \$2.00. The publishers are the Baby Book Company, Detroit, Michigan.

"Feeding Rules for Healthy Infants" is a second volume which has grown out of experience with earlier editions of the first, and is exclusively devoted to a more extended presentation of the subject of feeding and nutrition in all its phases. The book contains 279 pages, costs \$1.00, and is published by the same house. Either or both of these books would be found of inestimable value to every mother, and they can scarcely be commended too highly.

"FOODS AND THEIR ADULTERATIONS."

In reading the new and revised edition of this important work we are impressed with the vast amount of information which it must disseminate on the subject of foodstuffs. The author, Harvey W. Wiley, Ph.D., through his position as chief chemist of the U. S. Department of Agriculture, has had every chance to become a master of this field. How well he has succeeded is evident from the book itself. It does much to enlighten not only the scientific but also the lay mind on the important question of nutrition.

The volume treats of the origin, manufacture, and composition of food products. There has been added, too, a carefully prepared article on infant and invalids' foods, which describes their preparation and use, and which is calculated to impress upon people having the care of invalids the great importance of feeding. Of course the detection of common adulterations and food standards are treated in a very comprehensive way. In general, Dr. Wiley's book will appeal to every human being interested in the broad study of hygiene. It contains a great deal of information about nutritive values and the use of food for bodily nourish-

ment that will be especially helpful to the householder. As for manufacturers and dealers in foodstuffs, they can hardly afford to be without Dr. Wiley's work.

There are 641 pages with 11 colored plates and 87 other illustrations. The price is \$4.00 in cloth.

A NEW BOOK OF FORMULAS.

"The Scientific American Cyclopedia of Formulas" has just come from the press of Munn & Co., 361 Broadway, New York City, publishers of the *Scientific American*. This book is a successor to the well-known volume entitled "Scientific American Cyclopedia of Receipts, Notes, and Queries"—a volume which has proved to be one of the most comprehensive and accurate books of formulas ever issued. The new work has been brought up to date, has been supplied with a lot of new material, and contains no fewer than 15,000 recipes of one kind and another. Every possible want is covered, and processes and formulas are given for cements, dyes, insecticides, lubricants, paints, photographic specialties, water-proofing substances, soaps, soldering materials, alloys, and pretty much everything else under the sun. A new chapter has been incorporated on chemical, pharmaceutical, and technical manipulation, which has been prepared with the aid of prominent chemists. The index in this new volume is particularly worthy of commendation. The book contains 1077 pages, is bound in cloth, and the price is \$5.00 net.

THE MODERN MATERIA MEDICA.

The second edition of a book with the foregoing title has been issued from the press of the *Druggists Circular*, 100 William Street, New York City. As with the first edition, this is a reprint of matter which has appeared in the journal from month to month. Several hundred (or perhaps thousand) of the newer chemical remedies and synthetics are alphabetically listed and described. A feature of the present edition is that the name and address of the manufacturers are also given. The description of each product is brief and yet sufficiently comprehensive for the information of the average pharmacist. Certain it is that every druggist needs some such book, for during the last decade or more the materia medica has been very largely made up of newer chemical products, many of which are not yet mentioned in the text and reference books. The present volume contains 432 pages and the price is \$1.25.

REVISION OF THE GENUS EUCALYPTUS.

J. H. Maiden, F.L.S., has published Part XII of "A Critical Revision of the Genus Eucalyptus." This number is vol. 2, part 2, or part xii of the entire work. Ten species are fully described, giving synonyms, affinities, and range, together with much supplementary information. There are four plates accompanying the text. This is a highly interesting group of plants as well as a most important one economically, and the treatment it is receiving by Mr. Maiden will undoubtedly be exhaustive and the most authoritative for many years to come. It is published by William Applegate Gullick, Sydney, Australia, for the government.

CAPSULES OF SCIENCE.

Prepared by Prof. W. L. SCOVILLE.

Quick-lunch Items.—

Fruit may be prematurely ripened by killing or stimulating the protoplasm by chemicals, such as the vapor of acetic acid, but in most cases the flavor is not good.

Danne says that the supply of natural gas in the United States threatens to become exhausted in twenty to fifty years. He thinks that nearly 60 per cent of the present supply is wasted, only 40 per cent being used.

Refined petroleum dissolves about 0.003 per cent of water, and petroleum oil about 0.003 per cent, at 15° C. The solubility increases with rise in temperature.

Barium oxide in glass increases its density and elasticity, and decreases its tendency to break when heated quickly, hence is specially useful in glass chimneys.

E. Ebler has obtained seven-thousandths of a grain of metallic radium, after weeks of work, and from it proves that radium has properties analogous to metallic barium.

Purified lampblack will remain suspended in water for months, but it takes a month to purify it sufficiently to accomplish this result.

Iodine gives a color with dextrin more quickly than with starch, and in greater dilutions, but the color is reddish instead of blue.

Clear, Clearer, Sterilized!—

Calcium permanganate is stated to be better than alum for clarifying reservoir and river waters, and it sterilizes at the same time. It decomposes in the water to form calcium hydroxide, manganese dioxide, and free oxygen. It must not be used in excess, but this is easily regulated by the color.

Ergot Some More.—

W. T. Wenzell has discovered another principle in ergot which he calls *ergoxanthine*. It is a yellow coloring matter, but is physiologically active, increasing the blood-pressure and slowing the heart.

A Distinction.—

W. Macadie, Ph.C., says that pure adrenalin is easily oxidized, but that the hydrochloride is not. He says that discoloration in adrenalin hydrochloride solutions is due to the action of ammonia, which first frees adrenalin, then forms a colored compound with it.

One Germ's Food—Another's Poison.—

Three English bacteriologists find that some bacteria found in water will oxidize phenol and apparently will thrive on it. The disinfectant properties of the phenol appear to be destroyed by the action.

A Niagara Rival.—

Professor Tolman has proved that in making a solution of an electrolyte an electromotive force is developed in the dissociation of the salt, thus furnishing a direct proof that electric dissociation takes place in salt solutions.

Oh, You Seaweed!—

A new substitute for gum and gelatin is the soluble sodium-ammonium salt of laminaric acid, which is obtained on a manufacturing scale from the seaweeds of the North Atlantic. It swells in water, forming a brownish-yellow colloidal solution possessing a high viscosity and adhesive properties equal to tragacanth. It is being introduced commercially under the name "Norgine" as a new sizing agent.

Koumiss, Not Miss-cow.—

B. Rubinsky says that true koumiss can be prepared from mare's or camel's milk, but not from cow's milk, because the proteins of cow's milk are not peptonized by the koumiss ferment, while those of mare's and camel's milk are. Normal koumiss contains 0.5 to 0.8 per cent of lactic acid and 0.7 to 2 per cent of alcohol, and the protein is entirely changed in character, being partly peptonized.

Cheap Emulsions.—

Professor Pickering says that basic sulphates of copper, iron, nickel, zinc, and aluminum, by adding lime to the normal sulphates, produce true emulsions of oil and water, which are permanent. Thus 1 grain of ferrous sulphate precipitated by lime will emulsify 200 Cc. of oil in 3000 Cc. of water, or 100 Cc. of oil in 400 Cc. of water, or 30 Cc. of oil in 20 Cc. of water.

Tungsten Jelly.—

In the manufacture of tungsten filaments for incandescent lights, a colloidal solution of tungsten containing 40 per cent of the metal is first formed. One-tenth per cent of ammonium chloride is sufficient to precipitate all of the tungsten from this solution in a gelatinous form which can be molded into filaments.

Paralyzed, Dead, Embalmed—Resurrected!—

Alcohol is found to act on enzyme ferments in three ways: 20 to 30 per cent inhibits their action, but the action is restored by dilution; 30 per cent to the precipitating strength destroys the enzyme; and strong alcohol precipitates it, the precipitate being reactivated when dissolved in a nutrient solution.

Try It On the Dog.—

A German chemist has found that the power of morphine habitué to take large doses of morphine is due partly to an acquired toleration of the tissues, and partly to an ever-increasing power of decomposing the morphine within the body.

The Why and Wherefore.—

P. Rohland says that powders of a colloidal character will remain suspended in water for days, but that powders of the crystalloid class, however fine, will settle quickly; but a film of colloidal character over crystalloid particles will hold the latter in suspension.

Cheaper Camphor.—

There are now 3500 camphor trees in German East Africa, from which camphor is obtained by distilling the leaves. The average yield from leaves and twigs is one per cent. This source of camphor will cut a figure in the market in years to come.

QUERIES.

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Figuring Alcohol Percentages.

W. A. A. submits three formulas with the request that we tell the percentages of alcohol in the finished preparations and the method of determining them.

In printing the formulas we are indicating, after each ingredient, the quantity; also the per cent and content of absolute alcohol.

	Per cent of abs. alc.	Amount of abs. alc.
(1) Chloroform, 4 drachms.....	0.5	1.2 minims.
Paregoric, 4 ounces.....	44.0	14.08 drachms.
Syrup of ipecac, 3 ounces.....	2.0	0.48 drachms.
Hive syrup, 4 ounces.....	2.0	0.64 drachms.
Syrup of wild cherry, 20 ounces.		
Solution of ammonium chloride,		
8 ounces.		
Syrup of licorice, enough to make		
½ gal. (1 pint 8½ ounces)....	3.6	.882 ounces.

In ½-gallon of the finished mixture there is, therefore, the sum of the alcoholic contents of the ingredients or 22 drachms, 16.56 minims. One-half gallon equals 512 drachms. Therefore $(22\frac{1}{4} \div 512) = 0.0434$, or 4.345 per cent of absolute alcohol. In such problems some are accustomed to reducing all the quantities to minims, but that is arbitrary.

	Per cent of abs. alc.	Amount of abs. alc.
(2) Quince seed, 3 ounces.		
Boric acid, 1 drachm.		
Glycerin, 24 ounces.		
Alcohol, 24 ounces.....	95	10944 minims.
Tincture of benzoin, 1 ounce.....	80	384 minims.
Extract of violet, 2 ounces.....	65	624 minims.
Water, enough to make 1 gallon.		

Proceeding, $(10944 + 384 + 624) \div (128 \times 480)$ or $11952 \div 61440 = 0.1945$, or 19.45 per cent of absolute alcohol.

	Per cent of abs. alc.	Amount of abs. alc.
(3) Quinine sulphate, 20 grains.		
Resorcin, 60 grains.		
Glycerin, 4 fluidrachms.		
Tincture of cantharides, 2		
fluidrachms	90	108 minims.
Tincture of capsicum, 2		
fluidrachms	87	104.4 minims.
Cologne water, ½ fluidounce.....	65	156 minims.
Alcohol, 4½ fluidounces.....	95	2052 minims.
Water, enough to make one pint,		
10 fluidounces.		

Dividing $(108 + 104.4 + 156 + 2052)$ by 12480 we get 19.39 per cent of absolute alcohol.

Diluting Acetic Acid: A Percentage Problem.

W. C. H. submits a rather pointed question. He asks: "In what proportions would you mix glacial acetic acid 80 per cent and water so as to make a 36-per-cent acid? According to an article I saw in a magazine some time ago, it would take nine ounces of 80 per cent and 16 ounces of water. Is that right? In Remington's Pharmacy is a similar example,

and figuring it according to that, it would take nine ounces of the one and eleven of the other. Which is right?"

Here is the calculation:

80% acid	}	36% acid	{ 36 parts = 9
0% water				{ 44 parts = 11
9 oz. by wt. 80% acid	}		To make 36% acid.
11 oz. by wt. water			

The mistaken statement that 9 ounces of 80-per-cent acid and 16 ounces of water are needed has evidently been made by calculating on a basis of glacial acid 100 per cent, as follows:

100% acid	}	36% acid	{	36 parts = 9 parts.
0% water				64 parts = 16 parts.

Eighty-per-cent acetic acid is not glacial.

Stock Dips.

W. D. Co.—The following formula for a sheep dip is recommended by the United States Department of Agriculture. It should be generally serviceable for stock:

Soap.....	1 pound.
Crude carbolic acid.....	1 pint.
Water	50 gallons.

Dissolve the soap in a gallon or more of boiling water, add the acid, and stir thoroughly.

The following formulas have been approved by the British Board of Agriculture:

LIME AND SULPHUR DIP.

Mix 25 pounds of sulphur with 12½ pounds of good quick-lime. Triturate the mixture with water to a smooth cream and transfer this to a boiler of 20 gallons capacity. Make up the volume with water to 20 gallons, boil and stir during half an hour, when the liquid should have a dark-red color. If yellowish, continue the boiling until the dark-red color is obtained, keeping the volume at 20 gallons. When the liquid is cooked decant off from any small quantity of insoluble residue and make up the volume to 100 gallons with water.

CARBOLIC ACID AND SOFT SOAP DIP.

Dissolve 5 pounds of good soft soap, with gentle warming, in 3 quarts of good crude carbolic acid. Mix the liquid with sufficient water to make 100 gallons.

Compound Liniment of Camphor.

W. A. M. wants a formula of an antiseptic liniment for internal and external use. While we do not know the composition of the proprietary mixture that he mentions, we suggest the following formula:

Camphor	2 ounces av.
Capsicum, powder.....	½ ounce av.
Oil of origanum.....	1 fluidounce.
Oil of hemlock.....	1 fluidounce.
Oil of sassafras.....	2 fluidrachms.
Oil of cajuput.....	2 fluidrachms.
Oil of turpentine.....	1 fluidrachm.
Alcohol	16 fluidounces.

Mix, macerate for 14 days, and filter in a well-covered funnel.

This is recommended for both external and internal use.

It is used in chronic rheumatism, bruises, sprains, chilblains, lameness, etc. In ordinary cases, rub in well several times, then wrap in warm flannel. Internally take 20 drops on sugar. In severe and obstinate cases, bathe the parts as directed, apply flannel, and keep the latter moist with the liniment. In case of toothache, apply a small quantity of the liquid to the hollow of the tooth on a piece of cotton. If the face is swollen, apply some of the liquid externally.

The Term "For Technical Use."

G. A. C. submits the following: "We frequently receive packages of chemicals labeled 'For Technical Use.' Will you kindly inform me just what is meant by the phrase?"

This term implies that a given article is not intended for medicinal use and is not in conformity with medicinal requirements. Chemicals so labeled are intended for employment in industrial arts, and to use this phrase exempts them from the necessity of conforming to U. S. P. requirements.

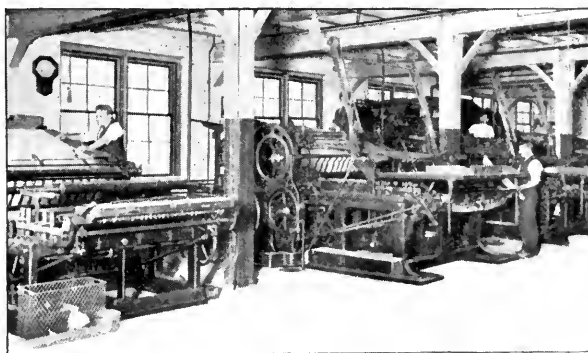
The U. S. P. standards and the food and drug laws affect substances only when used for medicinal purposes. The Federal food and drugs act, for instance, has no jurisdiction over any product not used in medicine. From the above you will learn that a pharmacopoeial substance may be sold for industrial use without being of the U. S. P. degree of purity—providing the phrase "For technical use" is plainly printed on the label. But be careful that such substances are not employed in medicine, for it is doubtless true that in most instances they are not in conformity with the U. S. P. requirements.

Moth Powders.

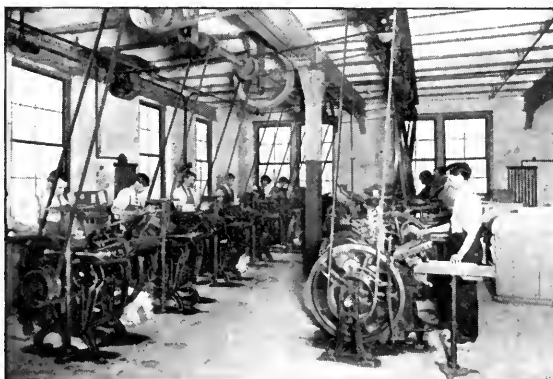
O. H. L. writes: "Please publish a good formula for a moth killer that can be made without any special apparatus. I want one that can be used to sprinkle the carpet as it lays on the floor."

Drench the carpet with gasoline or benzine, which will

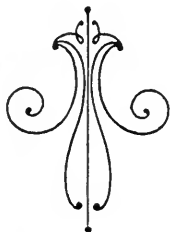
Where the Bulletin of Pharmacy is Printed.



Where the advertisements are set up and the forms made up for the presses.



Some of the cylinder presses on which the Bulletin of Pharmacy is printed.



A section of the pressroom showing the job presses.



destroy all larvæ. They have the advantage of evaporating quickly, but must be used with care for fear of fire. Compound solution of cresol in 1- or 2-per-cent solution should be effective, although the coal-tar smell will persist for a day or two. If a moth powder were not intolerable, the following mixture could be used:

Naphthalin	8 ounces av.
Orris root.....	2 ounces av.
Patchouli herb.....	2 ounces av.
Camphor	2 ounces av.

Reduce all to powder and mix well.

Santal and Saw Palmetto Elixir.

H. E. D.—We do not know the composition of the proprietary mixture which you mention, but the following formulas have been suggested:

- (1) Saw palmetto.....½ ounce av.
Yellow sandalwood.....1 ounce av.
Couch-grass1 ounce av.
Alcohol,
Water, of each.....sufficient.
Sugar.....3½ ounces av.

Extract the three drugs reduced to coarse powder with a mixture of 1 part of alcohol and 3 parts of water so as to obtain 14 fluidounces, and in the latter dissolve the sugar by agitation.

- (2) Take of
Saw palmetto berries.....8 ounces.
Corn-silk8 ounces.
Sandalwood2 ounces.
Sugar6 ounces.
Alcohol,
Water, each enough to make.....2 pints.

Mix twelve fluidounces of alcohol with thirty-six fluidounces of water. With this menstruum moisten the previously ground drugs and macerate during twenty-four hours. Then pack firmly in a percolator and pour on the remainder of the menstruum, allowing the percolate to drop slowly. In this dissolve the sugar by agitation. Finally pass sufficient water through the exhausted drugs to make the finished elixir measure two pints. Caramel may be added if the color is not deep enough. Each fluidounce of this elixir is taken to represent saw palmetto berries, 120 grains; corn-silk, 120 grains; sandalwood, 30 grains.

Hektograph Inks.

G. L.—Here are a few formulas of hektograph inks:

BLACK.

- (1) Methyl violet10 parts.
Nigrosine20 parts.
Glycerin30 parts.
Gum arabic5 parts.
Alcohol60 parts.
- (2) Nigrosine black1 part.
Water14 parts.
Glycerin4 parts.

This will make a black ink suitable for use with the hektograph. In order to make it copy add more glycerin, gum arabic, or sugar.

BLUE.

Resorcin blue, M.....	10 parts.
Dilute acetic acid.....	1 part.
Water	85 parts.
Glycerin	4 parts.
Alcohol	10 parts.

Dissolve by the aid of heat.

Soothing Syrup.

W. A. M.—We do not know the composition of the proprietary soothing syrup which you mention, but the following formulas are found in the literature:

Anise	1¼ ounces av.
Fennel	½ ounce av.
Caraway	½ ounce av.
Lupulin	120 grains.
Ginger	25 grains.
Lactucarium	30 grains.
Diluted alcohol.....	sufficient.
Simple syrup.....	21 fluidounces.

Mix the drugs, reduce to powder, percolate with diluted alcohol so as to obtain 9 fluidounces of the product, and to this add the syrup.

Anise	1¼ ounces av.
Fennel	½ ounce av.
Lactucarium	25 grains.
Hops	120 grains.
Diluted alcohol	9 fluidounces.
Simple syrup, enough to make.....	30 fluidounces.

Mix the drugs, reduce to powder, percolate with diluted alcohol, and add the syrup.

Soap-bubble Liquids.

E. B. B. asks: "What can be added to a soap solution that will make the bubbles so tough that they will remain intact and can be juggled around?"

Every time one blows a nice bubble, one of the large, iridescent kind, it is apt to collapse at the slightest touch. But believing in bubbles just the same, we submit the following formulas for the soap liquid:

White hard soap.....	25 parts.
Glycerin	15 parts.
Water	1000 parts.
Dry Castile soap.....	2 parts.
Glycerin	30 parts.
Water	40 parts.

Just how much juggling the spheres will stand we can't tell.

A Kerosene Liniment.

A. H. F. wants a formula for a kerosene liniment which he says is good for rheumatism.

Here is one:

Capsicum, powder.....	60 grains.
Fusel oil.....	4 fluidrachms.
Oil of origanum.....	4 fluidrachms.
Oil of sassafras.....	1 fluidounce.
Oil of turpentine.....	8 fluidounces.
Kerosene oil.....	38 fluidounces.

Mix the whole, macerate for 24 hours, and strain through muslin.

Anti-Kink Hair Pomade.

J. L. F. and S. E.—To take the kink out of the hair and straighten it, we suggest what is known as Anti-Kink Hair Pomade:

Beef suet.....	16 ounces av.
Yellow wax	2 ounces av.
Castor oil	2 ounces av.
Benzoic acid	10 grains.
Oil of lemon.....	1 fluidrachm.
Oil of cassia.....	15 drops.

Mix the suet and wax, add the castor oil and acid, allow the mixture to cool somewhat, and incorporate the other oils.

"Healing Oil."

H. R. H.—We do not know the composition of the proprietary mixture which you mention, but you might try the following formula:

Menthol	2 parts.
Phenol	1 part.
Camphor	3 parts.
Cottonseed oil	94 parts.

Triturate the first three ingredients together and then rub up the resulting liquid with the cottonseed oil.

A Green Coloring Agent for Salve.

D. J. H. asks: "What is the best agent to impart a green color to salve?"

If the salve is yellow, use a little Prussian blue. The resultant color is green. If the ointment is white, use an oil-green soluble, obtainable from any dye house.

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THE MONTH'S HISTORY.

THE CONTRACT PLAN KILLED?

The decision of the United States Supreme Court in the Miles case has proved a startling and unwelcome surprise. Apparently it does away with every form of contract and rebate plan by which the manufacturer seeks to control the price of his products. Something may still be left from the wreck, but if so this will be determined after legal minds have analyzed the decision with more care, and particularly after new plans have been devised and subjected to the test of court construction.

The court held in effect that while the manufacturer of a patented article had proprietary rights which he could utilize in the control of prices, no such rights existed with the owners of secret reme-

dies, which, while they are colloquially called "patent medicines," of course have never been patented at all. With such substances the Miles contract was declared to be an unreasonable restraint of trade, and the court intimated that this would be true whether the title of the goods nominally remained with the manufacturer or was passed along to the venders. Only one member of the court, Mr. Justice Holmes, dissented from the majority opinion, and his view was that the Miles contract could be made legally sound by a slight change making wholesalers and retailers the legal agents of the company—a scheme which has all along been followed by the Freeman Company. It would seem, however, that the other members of the court do not agree with Justice Holmes in this contention.

If it turns out, as now seems likely, that the decision of the court does away with all price-restrictive plans, it does not follow that everything has gone to the demnition bow-wows. As several of our contemporaries have already pointed out, a change has come over the spirit of trade during the last ten or twelve years, particularly among pharmacists, and there is nothing like so much of a tendency in evidence to cut and slash prices. We need only remind our readers that for a time the Indianapolis decision was thought to be little less than a death-blow, but the drug trade quickly adapted itself to the changed situation and suffered little or no ill consequences.

* * *

THE "WORLD" SENSATION.

The sensational charges brought by the *New York World* are still echoing and reverberating, although with somewhat lessened intensity. While the thing was a novelty the *World* devoted from one to three columns a day to it, embellishing its stories with pen-and-ink drawings of some of the druggists and others figuring in the drama. People soon tire, however, of an overworked sensation, and the *World* is now looking for new muck in which to revel.

It was charged at first that the 300 prescriptions dispensed in different stores and purchased by a reporter of the *World*, were found in nearly 50 per cent of the cases to contain medicines deviating in one way or another from the standards. The greatest deficiencies were found in those tinctures and fluidextracts which were subjected to chemical or physiological assay. It turned out afterwards, however, that there were extenuating circumstances in many instances, and at any rate the authorities were able to bring prosecutions against but very few of the druggists. One druggist, it seems, mistook "rub. iodi." for "syr. rubi. idæ.," and so dispensed a solution of raspberry syrup, and the prescription was so illegibly written that he could scarcely be blamed for making this error. Consequently his prosecution in court for dispensing a prescription of rubidium iodide in which there was no rubidium, and the analysis of the chemist showing an entire absence of the metal, fell rather flat.

So far, of course, as the charges brought by the *World* are justified in fact, they teach the moral that druggists can be none too careful in the purchase of their medicinal supplies. Tinctures and fluidextracts for which standards are provided by the Pharmacopœia should bear the labels of responsible manufacturers who are known to be over-punctilious in the matter of standardization. Prof. Virgil Coblentz was employed by the *World* to make the analyses of the 300 prescriptions, and since the crusade began he has resigned from his professorship in the New York College of Pharmacy to become chief chemist of E. R. Squibb & Sons. It is declared, however, that the *World* sensation had nothing to do with his resignation. The H. K. Mulford Co. of Philadelphia made some of the analyses for Professor Coblentz, entirely ignorant of what use was to be made of the findings, and they were very much chagrined afterwards when they found that they had unconsciously played into the hands of newspaper sensationalists at the expense of the retail trade.

* * *

FOOD AND DRUGS ACT CONSTITUTIONAL.

The decision in the Lehn & Fink case has attracted a good deal of interest. The United States Circuit Court held, somewhat to the surprise of certain constitutional lawyers, that the food and drugs act was not unconstitutional because it provided that future editions of the N. F. and the U. S. P. should automatically become standards under the law.

Lehn & Fink contended that this was a delegation of legislative authority, and it was so held to be with respect to the Ohio statute ten or fifteen years ago. The present court declared, however, that the food and drugs act merely decreed that medicines must conform to the implied standards under which they were sold; that if they were sold under the titles of the Pharmacopœia and the N. F., they must accordingly conform to the U. S. P. or the N. F. standards, whatever those standards may be and whenever established; and that this constituted on the part of Congress no delegation of its legislative functions. This is rather adroit reasoning, but of course everybody hopes that in the interests of pure food and drug legislation it will be found good law.

Another point raised by Lehn & Fink was that a shipment of goods might be seized at a time when one Pharmacopœia was in effect; that it might be examined months later when a subsequent edition of the Pharmacopœia had become official; that injustice might thus be done to the shipper, and that therefore the act was unconstitutional. The court declared, on the contrary, that the phrase "official at the time of investigation" must be held to mean official "at the time the goods are shipped," regardless of when the actual analyses might be made. In other words, a manufacturer or shipper could not be punished for violating standards imposed *after* the act of sale or shipment had been performed, and he must be judged by the U. S. P. or N. F. in force at the time.

* * *

COCA-COLA AND ANTIKAMNIA.

Two or three other cases recently brought by the government are of considerable interest. The Coca-Cola case has been won by the defendants after a remarkable trial in the United States District Court of Tennessee. The judge refused to consider caffeine an injurious drug. He likewise refused to believe that the name "Coca-Cola" was in anywise misleading, holding that this title had from long custom become a distinctive name, and that the public knew exactly what it was buying. Experts for the government sought to prove many things against the product, and the government attorneys, failing in the district court, have carried the case to the Court of Appeals in Cincinnati.

In the meantime the Antikamnia case has been argued before the Court of Appeals of the District of Columbia. The nub of the contention here is:

Shall it be necessary for the manufacturer who prints the content of acetphenetidine or any other substance on the label of his product, to state the fact that this chemical is a derivative of acetanilide, or whatever one of the other six or seven substances mentioned in the food and drugs act may be involved? The Antikamnia people won the case in the lower court, and the present argument is made on the appeal.

* * *

LEGISLATIVE TROUBLES.

The legislative situation in Pennsylvania seems to be very complex and interesting these days.

The Fahey bill, providing for the publication of the formula on the label of all proprietary medicines, has stirred up quite a furore. The Philadelphia Association of Retail Druggists, after a meeting lasting two or three hours, finally voted by a large majority to oppose the bill. Later on, at a legislative hearing, Secretary Potts of the N. A. R. D. came from Chicago to argue against the measure; several others also opposed it; and it looks at this writing as if the bill would be put to sleep.

In the meantime almost as deep interest has been exhibited in the pharmacy measure. In one sense this is a blanket bill which represents a codification of existing pharmacy and anti-narcotic laws, but it also contains several new features over which there have developed marked differences of opinion. The State association last year voted to have the measure prohibit medical dispensing, but the framers of the draft afterwards left this provision out on the ground that legal counsel had advised them of its unconstitutionality. This has made the country druggists indignant, and for this and one or two other reasons they and their representatives in the legislature are now hostile toward the measure. The Philadelphia druggists were also at odds with one another over different features, but it is said that they have now gotten together.

Either in this pharmacy bill or in another measure in Pennsylvania, there is a provision limiting the work-day of registered clerks to ten hours, and that of qualified assistants and apprentices to twelve hours. Similar bills have been introduced in two or three other States, and with respect to one of these measures in Connecticut we have received a letter of protest which we are giving space elsewhere in the present issue of the BULLETIN. Evidently the clerks are fathering these bills, and it would seem that they are pushing them with a good deal of vigor.

THE OLDBERG CELEBRATION.

One of the delightful features of the month's history was the celebration in Chicago of the 25th anniversary of the School of Pharmacy of Northwestern University. Prof. Oscar Oldberg, the guest of honor, has retired from the deanship which he has held during the entire period of the School's history, and the occasion was really turned into a fine and beautiful tribute to him and to his services in behalf of pharmacy. President Harris of the University was toastmaster at the banquet, and greetings were brought from the deans of several other schools in the university group. The class of 1911 presented Dr. Oldberg with a handsome leather-bound address; the Faculty and some of the Alumni gave him a loving cup; and there was also given to the University a well executed bas-relief of the Doctor, modeled at the expense and through the initiative of the Alumni. The exercises were concluded by remarks from John Uri Lloyd and Harry B. Mason. Elsewhere in this issue we are reproducing one of the autograph portraits of Dr. Oldberg which were presented to his friends; we are also printing the address which he delivered at the anniversary banquet; and in an editorial we are endeavoring to pay tribute to the man and to the very important services which he has rendered in behalf of American pharmacy.

* * *

THE PHILADELPHIA COLLEGE.

The Philadelphia College of Pharmacy was brought to the front a couple of times last month. At a large and enthusiastic banquet held at the Union League Club, and presided over by Professor Remington, a portrait of President Howard B. French was presented to the college by the Alumni. The presentation speech was made by George M. Beringer with the latter's customary dignity and felicity. Mr. French violated his physician's orders to be in attendance, and he made a few remarks of appreciation at the close of the exercises. Meanwhile the newspapers have announced that the college would soon be moved to a position along the famous Parkway now being built from the City Hall to Fairmount Park, and that an alumnus of the college had promised to contribute one million dollars toward the erection and equipment of the new buildings. This English alumnus can apparently be none other than Henry S. Wellcome, but a cable from Mr. Wellcome's firm in London indicates that the rumor is unfounded.

AS TO PHYSICIANS' PRESCRIPTIONS.

This punishment of physicians for violating the Pennsylvania cocaine law reminds us that in Michigan it has been found almost impossible to punish physicians for a similar violation of the liquor local-option laws. Recently, for instance, a druggist has been convicted for selling a mixture of whisky and quinine even though he dispensed it in good faith upon the prescription of a physician. The physician went scot-free and the druggist was soaked! It is to avoid this sort of injustice that the Michigan Retail Druggists' Association has been endeavoring to have the liquor law so changed that in dry counties a purchaser's affidavit would be substituted for a physician's prescription. Out in Wisconsin a bill has been introduced in the State legislature restricting the sale of liquor by druggists to physicians' prescriptions, but the druggists are fighting it with tooth and nail. They have two or three of their own men in the State senate who are looking after their interests in the matter.

* * *

AFTER THE NARCOTIC MERCHANTS.

Many sentences have been imposed in the cocaine crusade carried on in Pittsburg by the Pennsylvania Board of Pharmacy. For the most part the culprits have been street peddlers of the drug, and in these cases jail and workhouse sentences have been the result. In other instances druggists were caught selling proprietary and other articles containing cocaine, and their defense was that they thought they had a legal right to furnish these products so long as, under the food and drug laws, the content of narcotic was stated on the label. This ignorance of the law was not accepted as a valid defense, but in such instances the court imposed fines and costs instead of jail sentences. Among those arrested but not yet tried are several physicians charged with writing prescriptions for habitual users of cocaine.

* * *

HYNSONIAN HARMONY.

The pharmacists and physicians of Detroit held their annual get-together meeting last month in the building of the Wayne County Medical Society. Henry P. Hynson of Baltimore was the invited guest of the pharmaceutical element, and he delivered the chief address of the occasion. It was received with very decided marks of approval by both pharmacists and physicians, and it was followed by an interesting and fruitful discussion.

Prior to the meeting a dinner was given Mr. Hynson by a few friends at the Hotel Cadillac, and toasts were responded to by Joseph Helfman, Prof. A. B. Stevens, Dr. Angus McLean, F. E. Bogart, and Mr. Hynson himself.

* * *

FIRE PROTECTION.

It is perfectly astonishing what chances merchants will take in going without adequate insurance. Not long since a western druggist who had built up a large business lost his complete stock and building by fire. The investment was fully \$75,000, but the amount of insurance carried was only \$10,000. If this unwise pharmacist collects every cent from debtors, with the \$10,000 insurance added, he cannot begin to pay his creditors. More than that, the labor and the accumulation of 25 years have been swept away in three hours—all because foresight was lacking to secure adequate fire protection. This druggist should easily have had from \$40,000 to \$50,000 of insurance.

* * *

VENEREAL ADVERTISING.

A new type of bill has made its appearance in several State legislatures during the last few years. It is a measure which prohibits the publication of advertisements in the lay press of remedies for venereal diseases, or even the advertisements of physicians or others who offer to treat these diseases. We believe a measure of this sort became law in one or two States last year, while others have been introduced this year in the legislatures of Ohio, Michigan and two or three other States. Certainly this type of bill is in the interest of the public health.

* * *

Treasurer Whelpley of the A. Ph. A. reported early last month that the Hallberg fund already totaled \$2230.29. Contributions made since that time have doubtless brought up the figure considerably, so that the final goal of \$3500 cannot be far away. Those desiring to contribute to this very laudable cause should correspond with Dr. H. M. Whelpley, 2342 Albion Place, St. Louis, Mo.

* * *

Wilhelm Bodemann has been elected to succeed the late Professor Hallberg as chairman of the U. S. P. Sub-committee on Miscellaneous Galenicals. The official number of this committee is 13, but a little thing like that won't bother Wilhelm any!

EDITORIAL.**HONOR TO WHOM HONOR IS RICHLY DUE—
PROFESSOR OSCAR OLDBERG.**

In Chicago last month there was fittingly celebrated the twenty-fifth anniversary of the School of Pharmacy of Northwestern University. Pharmacists and alumni from several States bore testimony to the importance of the occasion by their presence, and the banquet was impressive to a degree. But while the nominal purpose was to rejoice over the history of the School, it was in effect to pay honor and tribute to the man who founded the institution, who has for a quarter of a century presided over its destinies, and who has now reached the age when he feels compelled to retire from active service and turn his authority over to younger men.

It was eminently fitting that the services of Professor Oldberg to American Pharmacy in general, and to the Northwestern School in particular, should be made the subject of public acknowledgment and recognition. Few men in the profession have had his capacity for original and constructive thinking. Few have shown themselves his equal as a leader in educational thought and progress. Few have dedicated their gifts so generously, and with such absolute neglect of personal and selfish interests, to the welfare and redemption of their calling.

For considerably more than a quarter of a century Professor Oldberg has played a unique and important rôle in pharmacy. We can best describe it, at least to our own satisfaction, by saying that he has been a sort of philosopher on the mountain top—a seer who has had a calm, detached, broad view of the scene below him on all sides, who has observed and studied and pondered over the shifting panorama, who has realized what was missing here and there to complete the picture, who has more than once seen danger looming up and given warning of its approach, and who has with something of the old testament prophet in him pierced the future, foretold what would happen, and sought with forceful voice and eloquent pen to have wise and abundant preparation made for the inevitable.

Over-practical minds have held Professor Oldberg to be too much of an idealist. Perhaps, indeed, he has followed Emerson's advice and hitched his wagon to a star. But is there no place in

practical, democratic, money-loving America for fine and lofty ideals? Is there no need of men who shall inspire us onward and upward by holding high the standard and urging us eloquently to reach it? Here and there throughout the country one meets a student or follower of the professor who is faithfully carrying his ideas into effect, conducting a pure prescription pharmacy, and filling the rôle of "common chemist to the common people." Others, less fortunately situated, are coming as near to the goal as possible, and making themselves as much professional and scientific men as the circumstances will permit. And when you see these disciples you invariably find men who hold Professor Oldberg in such deep respect and veneration that their worship of him amounts almost to idolatry.

Ideas often outlive the men who conceive and give them utterance. If they are born of truth and rooted in human need, they go on growing in strength and force, and they are finally accepted by a public which has lost sight of their origin. It is yet far too early to measure the full results of Professor Oldberg's work as a leader, but already many of the reforms first agitated by him, and since taken up by others, are gradually being realized. For years he has been declaring with great force and vigor that the boards of pharmacy themselves have the power and authority to raise educational standards if only they would exercise it, and now we find many of them insisting upon a certain measure of preliminary education, denying "experience" credit to the colleges which do not live up to certain standards, and establishing requirements of one kind and another. He has always insisted, too, that the laws must provide for "assistant pharmacists" as well as fully registered pharmacists; that the requirements for one class must be much less severe than for the other; that the number of clerks would thus be incidentally increased while the number of stores would be decreased—and we find now that this idea has been quite generally accepted and that it is gaining force year by year. Back in 1906, and even before that, he declared that the boards and the colleges were all traveling their own paths; that the condition was one of confusion worse confounded; that agreement should be reached on a syllabus of subjects to which they could all conform—and now we have the syllabus movement well established, growing in favor, and promising much for the educational future of the calling.

We have not the space to take up in detail the

many educational, registrational, and legislative reforms which Professor Oldberg has urged with singular logic, power, and patience all these years. In epitome some of them may be found in the 13 principles prepared for discussion at the Indianapolis meeting of the A. Ph. A. in 1906, and it is our conviction that these principles, and the Professor's address that year as chairman of the Section on Education and Legislation, were models of clear thinking, constructive planning, and convincing English. Already Professor Oldberg as a prophet is not without much honor in his own country, but we venture the opinion that he will come into his own more and more as the years go by.

And what a fine, lofty character this is to which we are giving honor and shall continue to give honor! Never has there been the slightest stain on it! Never the least deviation from the path of quiet, simple honesty and dignity! He has never known what it was to practice the arts, even the accepted arts, of the shrewd politician; he has never sought to develop a "following," and indeed would not know how to go about it; he has never endeavored by "manipulation" to realize his legislative or associational purposes; his ideas have gained currency only by the sheer force of their own weight and importance.

His native honesty is shown in his own school, where he has carried into effect his ideals with such courage that it is an open secret that the institution has been an efficient educational agency at the expense of financial profit.

Loving his friends as few men do, blessed with the rare gift of humor, reveling in musical capacities of a high order, writing English like a master, measuring up to his ideals courageously but without posing or straining, living the simple, the natural, the rich life—let us wish him in his coming retirement many more years of fruitful, happy, contented effort! We of the BULLETIN OF PHARMACY especially wish him joy, for he was for three years, from 1895 to 1898, the editor-in-chief of this journal, and his high standards and lofty character are a precious heritage for which we feel profoundly grateful.

NARROWING PROFITS IN THE JOBBING TRADE.

There are many evidences that competition in both the retail and the jobbing branches of the drug trade is growing more severe little by little. The retailer scarcely needs to have this fact pointed out

to him—he knows it well enough. But perhaps he hasn't observed very closely the trend of things in the wholesale trade.

W. A. Hover, of Denver, Colorado, chairman of the Committee on Credits and Collections of the N. W. D. A., and one of the thinking men in the jobbing line, has recently compiled some statistics which are most interesting and significant in nature. Mr. Hover finds, for instance, that the cost of doing business in the jobbing drug trade has gradually increased from 9 per cent in 1878 to 12.85 per cent in 1909. Partially in explanation of this increase, he finds also that the percentage of sales *solicited by travelers* increased from 53.16 in 1899 to 64.5 in 1909. Thus within the short space of ten years the percentage of what might be called voluntary business—that is, business secured without the hard work of the traveling salesmen—decreased over 10 per cent. Rather a striking evidence of growing competition!

It is well known, of course, that proprietary articles afford little profit either to the retailer or the wholesaler. They are invariably sold at a pretty close margin, and it is perfectly clear that if a large portion of the dealer's business is made up of these articles he is bound to find it difficult to make very much money. Note, then, the significant fact that whereas the jobber in 1878 found 36 per cent of his business to be in patent medicines, he discovered this percentage to be 53.7 in 1909. In other words, more than half of the wholesale druggist's volume of trade is now made up of a line of goods in which the margin of profit is very close.

Scarcely surprising, is it, that under these circumstances the wholesale druggists of the United States are exhibiting a tendency toward consolidation? Within the last few years there have been several instances where two and sometimes three houses have combined their fortunes, with the result that much duplication has been avoided, the number of traveling salesmen has been reduced, and expenses have been cut down in many directions. We are bound to see more of this sort of thing in the years to come, particularly if the coöperative buying club movement continues to grow among the retailers.

As for the retailers themselves, while competition is gradually growing greater, we have often declared our conviction that the situation affords no cause for worry. Competition in a democratic and progressive country like America must always, and will always, grow in severity. The only thing for the

energetic man to do is to keep up with the procession. The retail druggist, like the business man in every other line, must advance with the times. He must do business on a more scientific scale; he must study modern methods; he must watch his competitors and go them one better. We do not think the live druggist has anything to fear from the department stores, the itinerant venders, the chain-store groups, or any other form of present-day competition. His problem is the problem of every other business man in America—to keep up with the times!

WHY MEN FAIL IN BUSINESS.

With a summary of the failures for 1910, *Bradstreet's* has presented its annual article in which the causes of failures are analyzed. Its investigations as to causes have been continued for a period of years. They show now as formerly that "tendencies present within the individual himself are largely responsible for four-fifths of all business failures," the remaining one-fifth being due to "extraneous conditions over which he has little, if any, control."

The researches of *Bradstreet's* have shown that the "faults within themselves" which cause men to fail are eight in number, as follows: Incompetence (irrespective of other causes); inexperience (without other incompetence); lack of capital; unwise granting of credits; speculation (outside regular business); neglect of business (due to doubtful habits); personal extravagance; fraudulent disposition of property.

In 1910 the failures due to the above causes comprised 82 per cent of the total, *while only 18 per cent were due to causes beyond the control of those who failed*; in 1909 the percentages were 81 and 19; in 1908 they were 75.5 and 22.5; in 1907, 81.1 and 18.9; and in 1906, 79.7 and 22.3. Of the eight causes named, "lack of capital," in 1910 as in all previous years, was the chief, being responsible for 33.9 per cent of failures. Next came "incompetence," which caused 26.6 per cent. "Fraud" was responsible for 11.2 per cent; this is about the normal percentage of fraud for a series of years, and presents, says the writer, "a curious and interesting exhibit."

These facts, carefully collected by experts over a series of years, are very suggestive, and they have their application to the drug business as well as to other lines of merchandising. In the drug trade it

is so easy to obtain a little credit and open a store that "the lack of capital" is even more of a factor in the production of failures or meager and indifferent successes than it is in other businesses. Experience shows it to be exceedingly unwise to start in business without ample capital unless one has reason to be unusually confident of his ability, determination, and capacity for hard work and self-sacrifice.

THE HALL OF FAME.

A PHARMACEUTICAL SENATOR.

Peder Jensen, who has for many years been secretary of the Board of Pharmacy of the State of Washington, is now wearing the senatorial toga in the State legislature. When we asked Mr. Jensen some months ago if it was true that he was nursing senatorial ambitions, he replied in characteristic fashion: "In politics? Well, I should say so! A Democrat—thank God!"

Mr. Jensen is one of the unique characters in the



PEDER JENSEN.

drug trade of the country. His sense of humor is very pronounced and very individual. Those who attend the annual meetings of the A. Ph. A. recall that he was a delegate last spring in Richmond to the meeting of the National Association of Boards of Pharmacy. As for his work in the State senate,

he writes in reply to our inquiry that he "hopes to be able to serve not only my constituents, but also my pharmaceutical brethren as a faithful watchdog of their best interests."

PROFESSOR WULLING ABROAD.

Frederick J. Wulling, dean of the Pharmacy Department of the University of Minnesota, has been sent to Europe by the University Board of Regents to get ideas for use in the construction of a new building which the U. of M. contemplates erecting in the fall. The Professor's health has not been particularly good of late, and he has wel-



PROF. F. J. WULLING.

comed the trip as a pleasant change. Because of his absence, and particularly because the establishment of the new *Journal of the A. Ph. A.* is now in an acute condition, Professor Wulling has withdrawn from the chairmanship of the A. Ph. A. Committee on Publication. Joseph W. England, who has made a close study of the proposed journal, has been elected by the Council to succeed him.

A PUBLIC-SPIRITED PHARMACIST.

During the last few months, since we began investigating the extent to which pharmacists here and there devote themselves to the public interest, we have been surprised to find how many of them have discharged their obligations as citizens and have been chosen to fill public office of one kind and

another. To the many instances mentioned in the BULLETIN of late we might add that of E. F. Heffner of Lock Haven, Pa. Mr. Heffner is well known to the druggists of Pennsylvania by virtue of the fact that he has now been serving for several



EDGAR F. HEFFNER, LOCK HAVEN, PA.

years as secretary of the State Pharmaceutical Association. It was only in 1896 that he was graduated from the Philadelphia College of Pharmacy, and at that time he took honors in materia medica and botany.

Mr. Heffner is a thorough believer in the principle that pharmacists ought to take prominent and leading parts in civic affairs, and in carrying out this



Mr. Heffner's residence.

philosophy in his own case he has had some very strenuous and exciting experiences. That his work has been appreciated, however, may be realized when we report that he has at various times been president of the Clinton County Taxpayers' League,

president of the Lock Haven Business Men's Association, and treasurer of the Y. M. C. A. He is at the present time secretary of the local Board of Trade, treasurer of the Clinton County Retail Druggists' Association, and junior warden and treasurer of St. Paul's Episcopal Church. After filling these various positions, and standing up generally for positive and aggressive methods, he expresses the opinion that to take a radical position in civic life openly and fearlessly never hurts any retailer provided he is sincere.

This must be true, because Mr. Heffner's business is generally understood to be one of the largest and most successful in his section of the State.

THE EXPANSION OF COOBAN.

The readers of this journal are particularly interested in B. S. Cooban of Chicago. For many years he contributed to the *BULLETIN* a series of live articles on different "own-make" specialties, and then he conducted for us a regular department



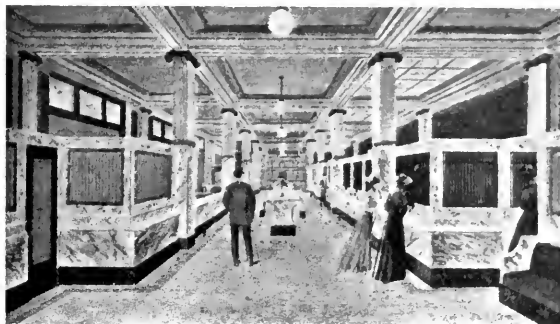
B. S. COOBAN.

of questions and answers on this subject. More recently we have failed to hear from Mr. Cooban except at irregular intervals, and at last we think we have discovered the reason.

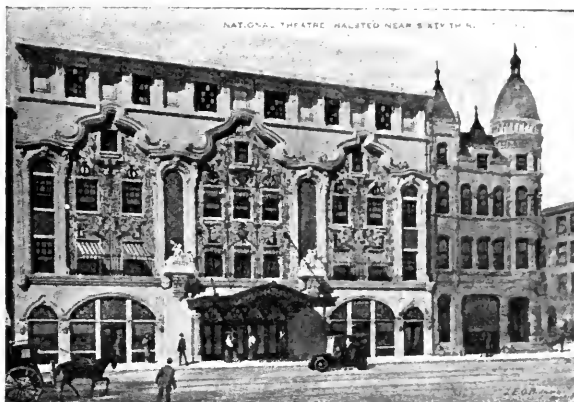
This ambitious Chicagoan seems to be branching out in a surprising number of directions. We have just learned, for instance, that he has become a director in three Chicago institutions of importance—the National Theater on Halsted Street, the Chicago City Bank on Engelwood Avenue, and the Concordia Building and Loan Association. The

first two of these three institutions are shown in the accompanying engravings, and it will be seen at a glance that both are quite imposing structures.

All this while, however, Cooban is continuing to



The Chicago City Bank, of which Mr. Cooban is a director.



Mr. Cooban is a director also in the National Theater.

study the problems of his own business with the same tireless energy and aggressiveness, and every year sees an increase in the volume of sales.

THE PHARMACEUTICAL INQUISITORS.

We are presenting this year from month to month the portraits of certain interesting groups of individuals in the pharmaceutical community. Last month, for instance, we introduced to our readers the pharmaceutical editors of the country. This month we are exhibiting the members of some of the American boards of pharmacy.

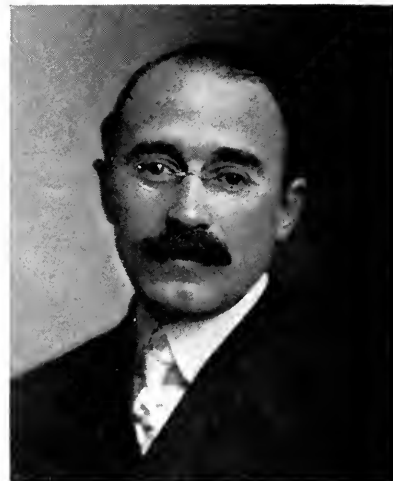
Turn over the next page and you will find 18 of these men—18 of the inquisitors before whom candidates for registration must pass before they can get their coveted papers. They all look kindly, but what a severe exam. they do put up occasionally! It is sometimes pretty hard to get by them, as many an applicant has found to his chagrin!



Charles B. Whilden, San Francisco,
California Board.



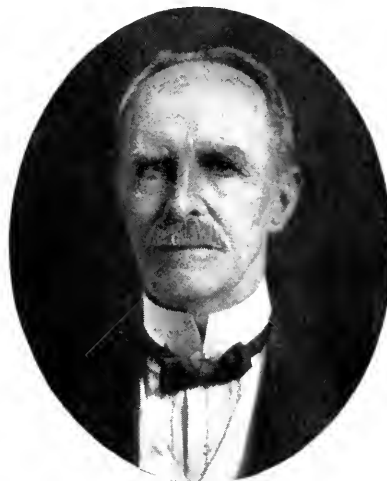
Addison Dimmitt, Louisville,
Kentucky Board.



S. L. Bresler, Denver, secretary
Colorado Board.



Edward Williams, Madison, secretary
Wisconsin Board.



Dr. J. B. Bond, Sr., Little Rock, president
Arkansas Board.



Edward P. Galt, Selma, secretary
Alabama Board.



M. W. Friedenborg, Winfield, president
Kansas Board.



E. T. Off, Pasadena,
California Board.



C. D. Jordan, Monticello,
Georgia Board.

Members of some of the American Boards of Pharmacy.



Ernest Berger, Tampa, president
Florida Board.



John A. Levery, Bridgeport, secretary
Connecticut Board.



A. F. Sala, Winchester, president
Indiana Board.



F. W. Bucknam, Skowhegan, secretary
Maine Board.



G. V. Kradwell, Racine,
Wisconsin Board.



Jerome J. Keene, Indianapolis,
Indiana Board.



Theo. E. Otto, Columbus,
Indiana Board.



E. F. Klein, Hot Springs,
Arkansas Board.



W. H. Fogas, Mt. Vernon,
Indiana Board.

Members of some of the American Boards of Pharmacy.



Thomas Voegeli, ex-president of the N. A. R. D., corner of Logan and Douglas Streets, Minneapolis.



Frank W. Bucknam, secretary of the Maine Board of Pharmacy, Skowhegan, Me.



A. H. Webber, ex-president of the Michigan Board of Pharmacy, Cadillac, Mich.



George B. Kauffman, dean of the College of Pharmacy of Ohio State University, Columbus, Ohio.

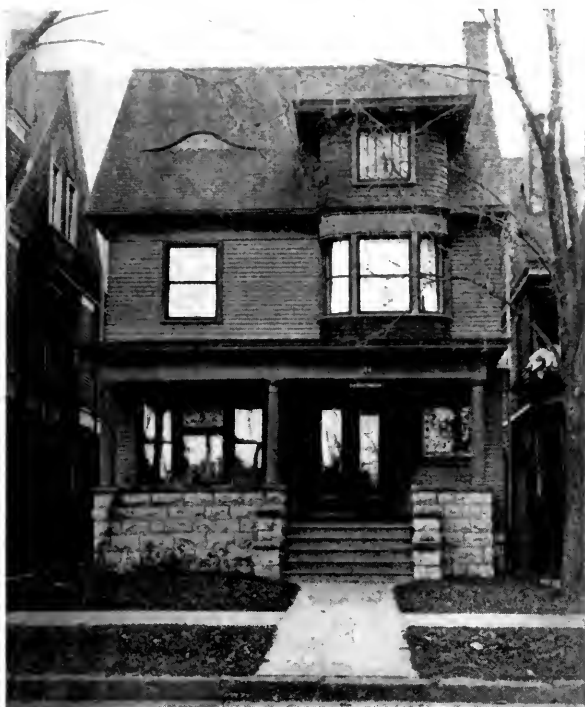


P. Henry Utech, the familiar writer on practical pharmaceutical subjects, Meadville, Pa.



Charles L. Hay, ex-president of the Pennsylvania Pharmaceutical Association, Dubois, Pa.

Homes of well-known druggists.



Willis G. Gregory, dean of the Buffalo College of Pharmacy, 344 Richmond Avenue, Buffalo, N. Y.



B. S. Cooban, well known by his contributions to the BULLETIN OF PHARMACY, 518 West 62d Street, Chicago.



Edward L. Baldwin is the owner and occupant of this exceedingly unique residence at the corner of Wollen and Buena Vista Avenues, San Francisco, Cal.

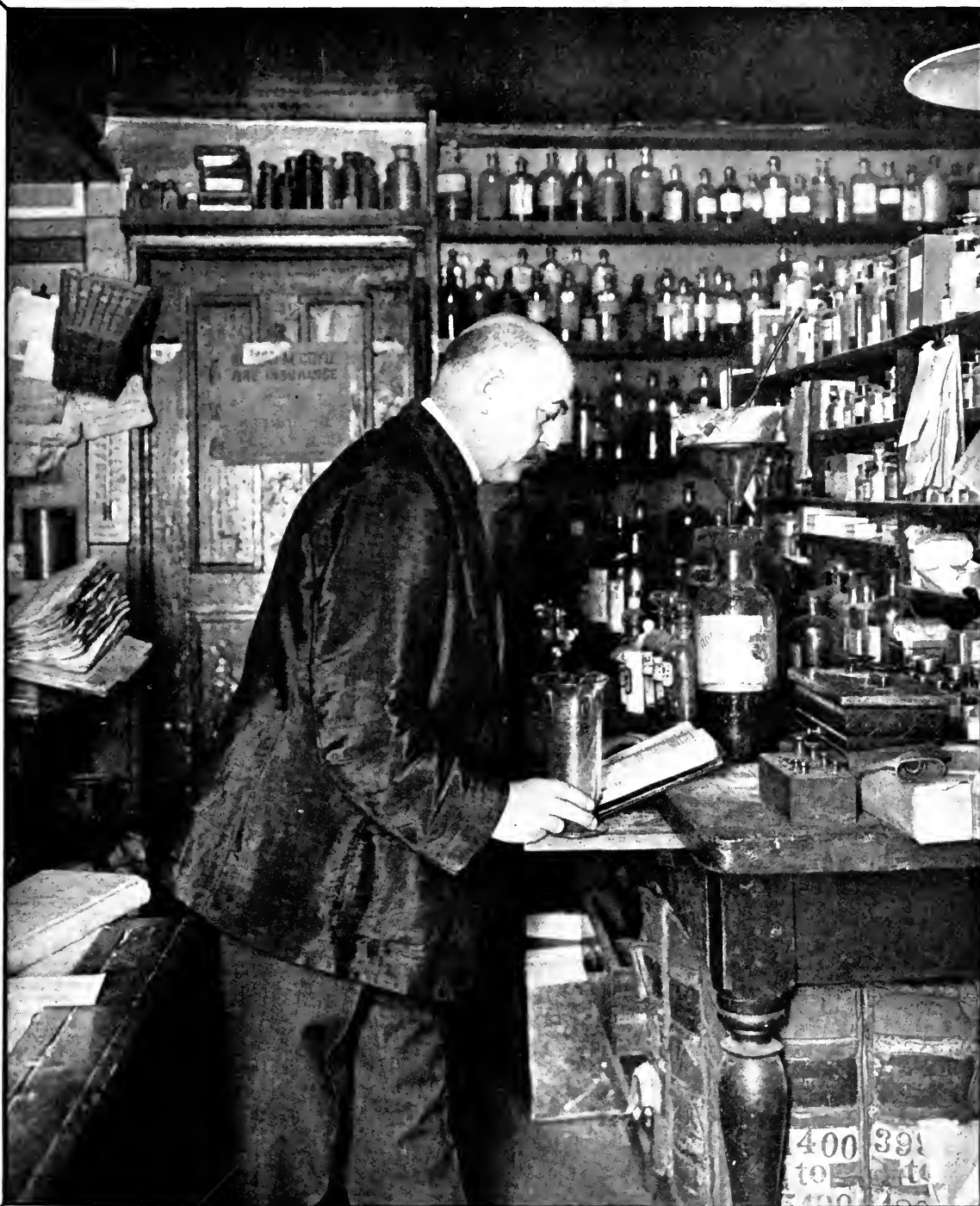


Henry D. Huggan, whose beautiful pharmacy was written up in the BULLETIN two or three years ago, built this residence for himself in Boston.

Homes of well-known druggists.



Truly yours Oscar Oldberg



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

3. Charles Leedom, Philadelphia, Pa.

Special Soda Section.

We have secured for this issue of the BULLETIN some of the most practical and valuable articles on the soda business that we could get—articles written in every case by successful soda dispensers themselves. Every contribution was especially prepared for this journal and has never appeared before. There are four or five short papers describing “Best Soda Schemes” which have been devised and successfully carried out for the development of trade. There are three or four articles in which experienced and well-known dispensers give a valuable collection of useful hints in the making and serving of drinks. And most important of all, perhaps, are a collection of formulas which have been awarded prizes in our recent contest—formulas which, unlike many that appear and reappear in the drug and soda journals, can be depended upon for their originality and excellence.—THE EDITORS.

PRIZE-WINNING SODA FORMULAS.

Recently the BULLETIN OF PHARMACY conducted a prize contest offering ten, five and five dollars respectively for three best soda formulas. The winners have been selected by a special committee of expert dispensers, and appear in this article. Since several of the formulas submitted deserve honorable mention, we are printing them along with the winners:

FIRST PRIZE FORMULA.

By L. W. HARTZ.

CHOCOLATE SOLDIER.

For a fancy, nice looking sundae, one that is suited to a fountain catering to the better class of trade, this is just the thing:

- 1 dipper of chocolate ice cream.
- 3½ lady fingers.
- 1 chocolate Teddy bear.
- 1 small American flag.

It sells for 20 cents, although some stores might charge a quarter. Teddy bears are made by the National Candy Company and can be obtained in any city at 60 cents a box of 1000.

SECOND PRIZE FORMULA.

By R. J. JENKINS.

DELICIOUS FROZEN SHERBET.

This frozen sherbet is literally a frozen phosphate, a delicious thing at the fountain. When first made, it has only a tart taste, the flavoring agent being added when the ice is served, thus allowing the dispenser to prepare any kind of a sherbet desired by using this base. I make five gallons at a time after the following formula:

Make a frozen ice exactly like lemon ice, but use only 1 ounce of citric acid in place of lemon juice, or enough to make the batch very tart.

To serve take a 7-ounce phosphate glass, put in 5 ounces of frozen phosphate, 1½ ounces of the desired crushed fruit, and mix well with a spoon. Serve with a cherry on top.

THIRD PRIZE FORMULA.

By P. I. MINTON, PLAINFIELD, N. J.

“POMPONA” ICE-CREAM SODA AND SUNDAE.

These are my best soda specialties. I first make the Pompona syrup as follows:

- Tincture of vanilla (pure).....2 ounces.
- Orange-flower water (best).....4 ounces.
- Chlorophyll (green coloring).....2 drachms.
- Syrup, enough to make.....1 gallon.

This makes a transparent, bright green syrup. For ice cream soda use:

- Pompona syrup2 ounces.
- Ice cream2 scoops.

Run in carbonated water to fill the glass and top off with a small amount of whipped cream.

POMPONA SUNDAE.

Put the usual amount of ice cream in a sundae glass, pour on Pompona syrup, add a little whipped cream, and top off with a cherry.

These two dainty soda specialties are entirely new and original with me, and many a customer has wondered what the peculiar flavor (of the combined orange-flower water and vanilla) was. It has made a great hit in our city. “Pompona” seems

to be the by-word. The word "Pompona" is a botanical term given to certain species of the vanilla bean tree. The name is catchy, odd, and new, having never been published before.

FORMULAS RECEIVING HONORABLE MENTION.

In addition to the three prize winners, the committee thought the following formulas were deserving of honorable mention:

"OUR SPECIAL."

(Sydney Trau, Cleveland, Ohio.)

Take a small mold (about 3 x 2 x 1 inches), put into it in opposite corners two red and two green cherries, and in the center set a round slice of pineapple. In the center of the pineapple put a decoration, filling the mold with cream of any desired flavor. Place two Nabisco wafers on a china platter, and empty the contents of the mold on the wafers. Then top off with whipped cream and English walnuts, the latter on top of the cream.

An easy way to keep the cream from sticking to the mold, and also to assist in the removal of the cream, is to wet the mold, then cut the sides with a knife and turn over. I use strawberry and vanilla cream unless specified.

I sell this for 15 cents.

CUBANOLA SUNDAE.

(L. W. Hartz.)

This is something new.

Slice an orange after peeling it. Cut a slice in half and place a half on each side of the plate. Set a cone of ice cream in the center, filbert nuts on one side, walnuts on the other, a green cherry on one half of the orange, a red cherry on other half. Sell for 15 cents.

MAJESTIC SUNDAE.

(L. W. Hartz.)

Use a parfait glass.

Cherry crushed fruit.....1 ounce.

Chocolate ice cream.....1 dipper.

Banana, sliced½

Vanilla ice cream or pineapple ice. Walnut meats on top. One red and one green cherry.

Sell for 15 cents.

HONEYMOON PANSY.

(R. E. Black, with the Beach Drug Co., Beach, N. D.)

This formula has made the greatest hit of anything in the soda line that I have struck.

Select a nice, solid cantaloupe and scrape the out-

side so that it looks neat and fresh. Then cut it into four pieces the shape of a new moon. Place these on a long platter, preferably a banana dish, then take a spoon and cut a notch on the points and lay a red cherry on each point.

Put a small dipper of ice cream in the center and pour a little thick chocolate syrup over it. Then cut a slice of pineapple—the kind that comes in little cans is easy to cut in the shape of a half moon, and place it on the top of the ice cream. Top with a little whipped cream and a cherry, then place a fresh pansy blossom on the dish and call it the "Honeymoon Pansy."

And as soon as you get it started everybody will be wearing the Honeymoon Pansy. I get 25 cents for this and nobody kicks.

BRAIN FAG DRINK.

(L. W. Hartz.)

Coca cola1 ounce.

One dash of lemon (fresh).

Fill the glass with carbonated water.

Sell for 5 cents.

CHOC-NUT SUNDAE.

(L. W. Hartz.)

This sundae has a bitter-sweet taste.

Vanilla ice cream.....1 dipper.

Chocolate syrup.

Grate bitter chocolate on top.

1 red cherry.

Sell for 10 cents.

GRAPE FLOAT.

(C. K. Bushey, Dillsburg, Pa.)

Fill a twelve-ounce glass to within an inch of the top with plain lemonade. Then carefully float on the top a sufficient quantity of grape juice to fill the glass, being careful not to disturb the lemonade, which will spoil the appearance.

A good, long drink and a thirst quencher is the result.

TWIN SUNDAE.

(L. W. Hartz.)

Use a bone-dish.

One slice of pineapple, halved.

Place a dipper of chocolate ice cream on one end and one dipper orange ice on other end.

Set a red cherry on chocolate ice cream and a green cherry on orange ice.

Place filbert nutmeats in the center or sliced pineapple.

Pour heavy maple syrup on each side of the pineapple.

Sell for 15 cents.

BOTTLED GINGER ALE.

(R. J. Jenkins.)

The following formula yields a delicious ginger ale that may be served either in bottles or in a glass:

Distilled water.....	4 gallons.
Granulated sugar.....	32 pounds.
Caramel coloring.....	4 ounces.
Vernor's ginger ale extract.....	16 ounces.
Solution citric acid.....	6 ounces.

CARAMEL SYRUP.

(R. J. Jenkins.)

Very few druggists know how to make a good caramel syrup. The most common mistake in making this flavoring agent is to use cream. I do not use cream. It sours too rapidly. I prefer Eagle brand condensed milk, which should be added after the batch is cooled. Otherwise it curdles. I use this formula:

Granulated sugar.....	12 pounds.
Boiling water.....	1 gallon.
Eagle brand condensed milk.....	1 can.

Burn the sugar until it is fully melted and of a rich, dark brown color. Remove it from the fire and add slowly 1 gallon of boiling water and boil until the sugar is entirely dissolved. Let it cool and add the condensed milk.

CHOCOLATE CREAM SUNDAE.

(S. C. Elwyn, Cartersville, Mo.)

Over a cone-shaped dish of ice cream that stands up well pour a small amount of chocolate. Round the edges, place three or four whole cherries and sprinkle a small amount of shredded cocoanut over the cone. Lastly set a piece of chocolate cream candy which has been pulled apart into halves on top of the cone.

This makes an attractive sundae and is also an advertisement for the candy department.

LEMON FLAVOR.

(Fred O. Mason, Litchfield, Conn.)

Here is a good formula for a lemon flavor:

Lemons (large)	12.
Oil of lemon.....	100 minims.
Sugar	18 pounds.
Water	12 pints.

To the grated peel add the sugar and oil. Pour in 1 quart of water and the juice of all the lemons. Triturate well and strain. Repeat, adding 3 pounds sugar and 1 quart water, until the sugar is exhausted.

TWIN CITY SPECIAL.

(D. L. Lucey, Chehalis, Wash.)

Take a 4-ounce wineglass, the inside of which has been wet, and scoop up vanilla and then straw-

berry ice creams. Then hold it upside down over a fancy sundae cup. Give the glass a quick twirl and the cream will drop out. Surround the base with maple syrup. Place three pineapple cubes on two opposite sides and one walnut half and one pecan half on the two remaining sides. Decorate with whipped cream and cherry and sprinkle powdered cocoa over the whole.

FRUIT SPECIAL.

(Oliver Rasico, Vincennes, Indiana.)

The following fruit mixture is a topping for sundaes. We use it on "Our Fruit Special," which has been a good seller.

Crushed strawberries.....	3 pints.
Crushed pineapple	½ pint.
Bananas chopped fine.....	No. 6.
Simple syrup, sufficient to bring mixture to the right consistency for dispensing.	

HURRY-UP CHOCOLATE SYRUP.

(D. L. Lucey, Chehalis, Wash.)

Extract the strength of nine ounces of cocoa with boiling water. Beat up the whites of six eggs and beat in the cocoa and water. Add boiling water and sugar to make two gallons. This can be made in ten minutes.

COLONEL JOCK.

(D. A. Frick, Audubon, Iowa.)

This has been a winner with us as a hot drink and equally good iced:

Grape juice.....	2 ounces.
Raspberry syrup.....	1½ ounces.
Ginger syrup.....	½ ounce.
Boiling water to fill a 12-ounce glass.	

"Colonel Jock" brings us 10 cents.

MINT FREEZE.

(D. A. Frick, Audubon, Iowa.)

Cracked ice, a small quantity.
Fresh mint, a few leaves cut up.

Express juice by pressing the leaves with a spoon against the side of the glass.

Juice of half a lemon.	
Juice of half an orange.	
Pineapple syrup.....	1½ ounces.
Grape juice.....	1½ ounces.

Run in carbonated water in a coarse stream to fill a 12-ounce glass.

Add each ingredient carefully without stirring, allowing the liquids to lie in layers.

Fruit with a slice of orange, a cube of pineapple, a maraschino cherry, and sprig of mint.

This is 20 cents a drink.

SERVING SODA BEVERAGES.

BY JAMES WHELAN,

Chief Soda Dispenser for the Gray & Worcester Stores, Detroit, Mich.

When mixing an egg drink or fancy drink of any kind to which soda is to be added, never let it stand on the counter a moment. After mixing completely, pour the beverage into the service glass at once, as a mixed drink of any kind that contains soda gets flat quickly. Serve the customer as soon as possible.

SOME HINTS.

Large soda apparatus should have a carbonator. If the carbonator sets from 60 to 100 feet away from where the soda is drawn, the gas should be kept under a pressure of 150 pounds. If the carbonator is less than 60 feet away, the pressure should be at least 120 pounds.

I advise one about to buy a carbonator to be careful in selecting it. Buy one as simple as possible. Also one which has an agitator which will mix the gas and soda thoroughly.

A word to the wise soda man buying gas: be careful to procure mineral gas; it is much stronger and drier than vegetable or beer gas.

To detect beer gas that contains vapor, let some of it strike a paper or the hand. The moisture is readily apparent. You will often detect beer gas, too, by an odor which mineral gas never contains. Mineral gas is dry and gives a very bright sparkle to soda water, and is, therefore, preferable.

As to cleanliness about soda apparatus, everything from top to bottom should be scrupulously clean. By having a system about your apparatus this should be a very easy problem.

Have fresh fruits on your soda fountain as early as possible, so that if you do not have them you know the other fellow is also unable to procure them.

Always try and have something your competitor does not serve. By this I mean something new and original at all times, and if you are at all adapted to your business this will come very easily to you, especially if you try.

Aim to change the decorating of the soda apparatus or back fixtures just the same as you do your display windows or stands. Always try to attract your customer or trade to your soda fountain, as soda water is a luxury which your customers do not have to buy and which they must be tempted into buying.

A shining, bright apparatus is essential. Just as

a nicely set dinner table will stimulate an appetite, so will a well-kept soda fountain create a thirst.

Electric fans add much to a soda counter, but do not turn them so that the air current will strike the cream or soda coolers, as it will melt both. The air from the fan is much warmer than that in the cooler or freezing compartments.

BOSTON NUT SUNDAE.

Boston Nut Sundae has been a winner with us. We make it up from day to day and sell it for ten



The "Boston Nut" sundae.

cents. The formula, which I originated myself, is as follows:

Mixed cherry fruit.....	1 pint.
Crushed pineapple fruit.....	1 pint.
Crushed strawberry fruit.....	1 pint.
Whole cherries	1 pint.
Maple syrup	2 pints.
Crushed or chopped walnuts.	

Mix well.

Use two ounces of this mixture over vanilla ice cream.

GOLDEN SUNSET SUNDAE.

This is a very tempting and appetizing dainty.

One 16-to-a-quart scoop of orange ice.

One 16-to-a-quart scoop of chocolate ice cream or other fancy cream.

Serve on small individual plates. Pour 1½ ounces of



The "Golden Sunset" sundae.

golden orangeade syrup over the cream and top with two cherries. Sell for 15 cents.

HOT SODA.

As to closing up a centrally located fountain in the winter, that is a thing of the past. Hot drinks manipulated correctly sell as readily as cold drinks. I should advise to the beginner in serving hot soda to serve hot lemonade, hot chocolate, hot coffee and hot phosphates.

Serve two or three wafers, such as a saltine wafer, a Graham wafer, and a macaroon, with the foregoing. A very good hint would be to change your variety of wafers occasionally, giving your trade something different.

Let this be your motto: A pleased customer is a walking ad. A little newspaper advertising along with an observation of these hints should surely make you successful.

DON'TS FOR SODA MEN.

Don't wear untidy linen.

Don't come to work with your nails dirty.

Don't chew gum back of a soda counter.

Don't wipe your hands on your apron.

Don't juggle glasses or drinks even though you may be able to do it successfully, as being unsuccessful may cost your firm the price of a lady's gown or a gentleman's suit.

Don't try to get a glass so full of a mixed drink or ice cream that it is going to slop over on the floor or counter.

Don't trifle with gas drums, carbonators or charging outfits unless you absolutely understand them.

Don't stand and converse with a customer while others are waiting to be served.

Don't handle shaved ice with your hands. Use an ice scoop.

Don't try to give your customers, or I should say lady friends, 15 cents' worth for ten cents. Your firm pays your salary. You are working for the store, not for your friends, and if you continue giving away goods the boss will soon catch you at it. This caution applies more to large soda fountains where from five to ten soda dispensers are employed.

A PLEA FOR TEN-CENT ICE-CREAM SODAS.

BY HOWARD PHELPS,

Chief Soda Dispenser of Standard Drug Co., Detroit, Mich.

Every bright, up-to-date druggist considers the modern soda fountain an indispensable adjunct to his business, for even if he only "breaks even" on it, the number of new customers which it brings to his store makes the fountain a desirable advertising feature of his business.

The evolution of the modern soda fountain and ice-cream soda is a very interesting study, and can be traced from the old-fashioned goose-neck draught-arm and small counter arrangement of a few plain bottle syrups to the gorgeous marble, silver and onyx creations of the present day.

Ice-cream sodas, if history is correct, were first served at the Centennial Exposition in Philadelphia and seem to have immediately caught the popular fancy of the people; but it was not until the year 1885 that the soda fountain began to make its appearance in the drug stores of the country as a permanent fixture of the business.

The price charged for these early sodas remained the same as for their predecessor, the plain soda, and this price, five cents, seems to have clung closely and remained the same in nearly all sections of the country until the last few years.

If the present fountain owner will stop to consider, he will see no resemblance between these earlier ice-cream sodas and the ones served at the present day.

The Sundae, College Ice, Dip, or Dope, as it is called in different sections of the country, is responsible in a measure for this, as its advent caused the addition of crushed fruits to the fountain menu, and it was only another small step to begin the use of crushed fruits in the ice-cream sodas in place of the fruit syrups already employed. Here is where the fountain owner should have made a distinction between the plain syrup and crushed fruit sodas. A few did, but the average owner seemed satisfied to stick to the old price of five cents.

This might do all right for the volume of business carried on at that time, but now the proprietor of a fountain catering to two or three thousand customers has to consider it in the light of a very serious proposition. It is a well-known fact that the ice-cream sodas of to-day cost practically as much to serve as the sundaes, for which the owner has no trouble in getting 10 and in some places 15 and 20 cents. Why should the fear of loss of

patronage deter the druggist from making a new price on a product which is well worth that price? Give people a little more ice cream, a little more fruit if necessary, make the soda cost six or even seven cents, but get the price which the owners in all the larger cities have come to consider necessary to the profitable running of their business. It has seldom failed of success wherever tried, and while some customers may not see the justice of raising the price, it is to be remembered that it only takes half as many ten-cent purchases to make the same

showing in the cash register. Also remember that there are hundreds of visitors to the fountain each year who have already paid 10 cents for their sodas at some of the large city fountains, and these visitors *expect* to pay 10 cents at your fountain unless told differently by *you*.

Let us follow the example of the big fountain owners and create a new universal price for ice-cream soda which will be recognized by the American people as the standard price for all time. It ought to be done.

A SODA FOUNTAIN IN A SMALL VILLAGE.

BY LOU E. PHELPS, EAST SMITHFIELD, PA.

The advisability of installing a fountain in a small town may be a topic quite apropos for this department inasmuch as the experiences of the small druggist seldom seem to get into print, and it is with the hope that some one with the same problems that we had to face may be helped by our solution of them that this paper is written.

Our village consists of seventy-five or eighty families and is located in the center of a township largely composed of dairy farms with a population of fourteen or fifteen hundred. These people do not easily part with their money and one can almost hear the scream of the eagle as they reluctantly lay their cherished coin on the counter in exchange for their necessary drugs.

The store force consisting of father and daughter had often considered the subject of investing in a small fountain, but had feared that it would not pay expenses. Finally in spite of unfavorable conditions, we bought a second-hand outfit consisting of a 10-foot marble slab with two double counter draughts, a crude ice-box, charging outfit, a drum of gas, one 10-gallon fountain, a dozen each of soda and mineral glasses with holders, phosphate bottle, eight syrup bottles, half a dozen each of ice-cream and soda spoons, and six pints of concentrated syrups. For this outfit, installed ready for use, we paid \$150 cash. This was in August, 1901.

STARTING IN A SMALL WAY.

We began with the expectation of "sawing wood," and we have kept the saw sharp and warm ever since—our one competitor served as an incentive to keep it sharp, and our determination kept it warm!

At first we sold soda Tuesdays and Saturdays

only, making the cream ourselves as economically as practicable, and found that quite passable cream could be made at an expense of only 26 cents a gallon for material. At the end of the first entire season (1902) we found our receipts for the season to be \$59.98, with a net gain of \$45.44, counting out our own labor. This we felt was a fair beginning, as our time had to be given to the business anyway, and the following year we adopted the policy of a steady advance in quality of material and a constant endeavor to make our soda and our service the very best.

THE BUSINESS PROGRESSING.

Each year we have tried to add some new flavor, cutting out the ones least in demand and continually studying to improve our cream and methods of service.

We made an ice-box in lieu of a cabinet to fit our space under the counter, from half-inch packing-box lumber, consisting of two thicknesses with one inch of sawdust between and lined with galvanized iron. In this we kept our freezer with a small cake of ice beside it, repacking the freezer twice a day.

We have found it impracticable so far to try to do anything with 10-cent sodas, and find that the bulk of our trade is in 5-cent ice-cream sodas and 5-cent sundaes, of which we sell about an equal amount. But we are now working for more 10-cent sundaes, for which we already have quite a sale.

From the first we have refused absolutely to sell cream or soda on Sunday, and in this are supported by practically all our own people. Transients sometimes call for it but are refused, although we are always ready to sell sick-room supplies on that day. As a usual thing we have let the excellence

of our soda and courteous and neat service do our advertising for us, but one season after a futile attempt by a neighboring barber to capture our trade by making cream and dispensing an imitation soda from a beer-pump, we issued the following card, size $3\frac{1}{4} \times 5\frac{1}{2}$ inches, to our customers:

"THE NORTH POLE"

SPRING ANNOUNCEMENT

The Soda season will open the first week in May at Phelps' Fountain, where you will find the same high standard of quality and service that has been maintained in the past, with the added degree of excellence which is attained only by practice and a constant study of down-to-date drinks and methods of service.

Cheap drinks or drinks of unknown composition are dear at any price, and as we always satisfy ourselves of the perfect safety of our syrups in all respects, our patrons may unhesitatingly rely on their purity and excellence.

We hereby wish to thank you for your liberal patronage in the past and bespeak your co-operation during the coming season. Yours for the best Soda,

D. G. PHELPS.

LOU E. PHELPS.

We have also made free use of a blackboard, using what skill we could command to make it attractive, which idea our wise competitor imitated. It soon became apparent to the public as well as to ourselves that he was playing a losing game, and in a short time he left town.

Two years ago the proprietor passed to his reward, but the business has been continued with the

help of the mother, and a boy hired as occasion demands to do the heavy work.

A NEW FOUNTAIN INSTALLED.

Last season we installed a 10-syrup Lippincott wall fountain (rebuilt) for \$250. Our equipment has been otherwise improved from year to year by adding more freezers, a new steel fountain, and other things as the work has demanded, and we now find ourselves well prepared to handle the business.

Our receipts last year were \$307.25, having steadily increased each year, and in spite of having a larger percentage of expense than usual the net gain was \$158.96.

At present our flavors consist of chocolate, strawberry, pineapple, vanilla, lemon, and orange. We serve such beverages as lemon phosphate, grape juice, and Hires's root beer, with occasionally a "special."

Our chocolate syrup and our ice-cream have each received a large share of attention and both have rewarded us for our care. We have taken particular pains to make our cream a smooth, rich product from healthful materials, and our success has been such that we sell considerable by the quart and gallon and have the reputation of making the best cream in the community, our formula being kept strictly to ourselves. We feel that the end is not yet and are prepared to continue the good work.

DISTRIBUTING FREE SODA COUPONS.

BY STANLEY CAIRNS, FOREST, ONTARIO.

The most successful plan that we have used for exploiting our soda business was that of distributing free coupons. These coupons were plainly printed cards, supplied by our local printer and costing but a few cents a hundred. When presented at our fountain each one was worth five cents. At first we had the cards good only when buying a special soda of our own formulæ, but we changed it later as we found it paid better to make the coupons redeemable any time.

HOW THE COUPONS WERE DISTRIBUTED.

At the beginning of the busy season we sent our boy around with the coupons and saw to it that each one was placed in the hands of an adult in some family, and in this way created more interest. None were thrown in the doorway.

Now as to results: There was only one card in each family, and therefore only one member could

benefit by it. But do you suppose that one person was going to go and have his soda alone on a busy day? Not much. They stood treat to their friends, sometimes three or four of them, and more often than not they would purchase a 10-cent dish. Some merchants might object to this scheme on the ground that most people would not bother with a coupon only worth 5 cents and would either throw it away or give it to children. But the majority of housewives these days are not inclined to throw away anything of value or a bargain, even if it is only worth 5 cents. And even if they do give it to children, it is turned to gain. We use them as kindly as possible, they get in the habit of coming here, and their parents appreciate our courteous treatment of the youngsters.

We use this system several times a year and our business has increased wonderfully. We have yet to lose on it.

THE FOUNTAIN LOANED FOR CHARITY'S SAKE.

BY EDWARD MANN, SARNIA, ONTARIO.

I will attempt to describe how we helped boom our soda business after entering the field.

The women of a charitable society in town had asked for the loan of our window on certain afternoons for the sale of home-made baking and candy. It occurred to us that a good way to advertise our soda business would be to offer our fountain to the women and the window also. My boss did this, and the ladies were delighted with the offer. They accepted at once. Our offer also included the free use of flavoring syrups, soda water, etc., and one of us was to remain at the fountain and dispense for them. The only thing for which we did not foot the bill was the ice cream, and we offered to pay for that, but they refused. As some of the ladies had freezers, they decided to make their own cream.

The society advertised the sale well, both in the local papers and by posters, and our courtesy and name were prominently mentioned in every such case.

HOW THE SCHEME WORKED OUT.

When the Saturday came, the counters were filled to the limit all day. The women displayed their home-made cooking and candy in the window, and thus attracted passers-by. It was in this way that I found out that apple pie and ice cream was a splendid seller at 10 cents a dish. Now I always keep them on hand. As I said before, one of us remained at the fountain all day. But the ladies made able assistants and helped us clean up.

All the members of the society were delighted with the success of their day's work, and their effusive thanks were nearly reward enough for our trouble. But let me tell you we got more than thanks the rest of the summer. Although we lost the proceeds of the day's business, plus a great many other things, the sale was one of the finest advertisements that we ever had. Our soda patronage received a stimulus that day that no newspaper advertising would ever have given it. The ladies are still regular customers.

A PERCOLATOR FOR MAKING SIMPLE SYRUP.

BY HOWARD PHELPS, DETROIT, MICH.

The making of a good home-made percolator is a very simple matter and also inexpensive. Every owner of a fountain who does not feel like buying one of the many styles of syrup percolators now on the market will find this percolator entirely satisfactory. I have used it for the last four years and have never had a particle of trouble with it. This cannot be said of many of the percolators which are on sale at very fancy prices. The syrup if made properly will be very heavy, practically a saturated solution, and can be thinned down to suit the fancy of the dispenser.

1. Get a good alcohol or whisky barrel, one that has not been charred if possible.

2. Remove the head and saw a circular hole in it about 5 inches in diameter.

3. Fill the barrel with hot water and sal soda and let it stand over night. Then rinse it out thoroughly. This will tighten the hoops and sweeten up the barrel.

4. Bore a hole at the bottom side of the barrel

and put a syrup gate or faucet in. This gate can be purchased at any hardware store for about 40 cents and should be placed on a vertical line with the bunghole of the barrel.

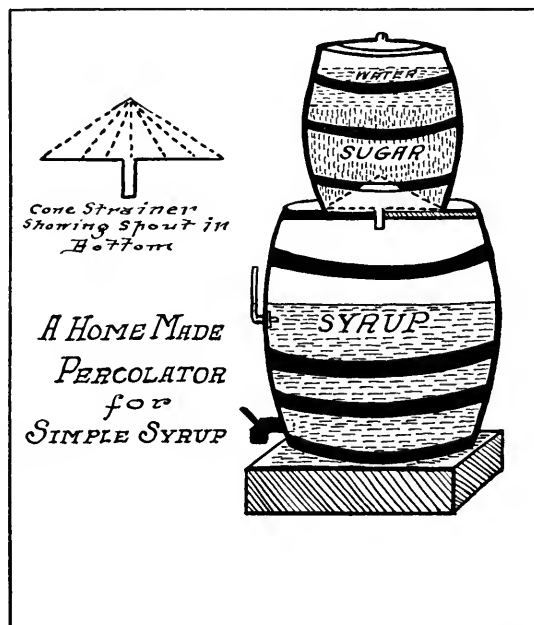
5. Place the head back in the barrel and the syrup reservoir is ready.

A glass gauge can be placed in the side of barrel by bending a piece of water-gauge tubing and putting this in a cork to be inserted in the bunghole. This will register the amount of syrup in the barrel after it is half-full, and in the case of a large user of syrup is to be desired, as it is well to keep a half-barrel of syrup on hand during the summer months.

6. Secure a 20-gallon keg, one which has contained alcohol if possible. Remove the head and wash thoroughly.

This is the percolator proper and should be selected carefully. Now bore a hole exactly in the center of the bottom of the keg about one-half inch in diameter.

7. Measure the inside diameter of the keg, and have a tinsmith make a cone-shaped strainer to fit in the bottom of the keg. This strainer has a solid tin bottom with a small $\frac{3}{8}$ -inch spout about



3 inches long running from exact center of bottom as per illustration. The cone should be about 6 inches high at center and is made of heavy metal sieving found in any tinshop.

8. Tie a piece of cheese-cloth of double thickness

over the cone, using the spout on the under side of the strainer to tie the ends of the cloth to.

9. Place the strainer cone in the bottom of the keg with the metal tube protruding through hole in keg.

10. Fill the keg with granulated sugar to within 10 inches of top, and then add enough water to fill to top.

11. Place this on top of the big barrel or syrup reservoir and allow it to percolate.

12. The percolator cone should be cleaned about once a month and a new cheese-cloth placed over it. The sugar which is in the keg at the time of the cleaning can be dumped out in a receptacle and put back in the keg after the cheese-cloth is replaced.

In case the percolator is to be stopped for a time, fill it to the top with sugar and add enough water to moisten it thoroughly. This will keep the keg from drying out and leaking.

Never add water unless the keg is at least half-full of sugar, as the water may form a hole down through the sugar and run into the syrup reservoir without forming syrup. This water will float on the syrup in the reservoir and soon ferment enough to spoil the whole amount of syrup.

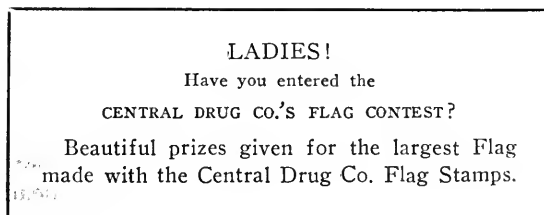
In case this should happen, draw off all the syrup in the reservoir and pass it back through the percolating keg immediately. This will mix the syrup and water and stop fermentation.

A FLAG CONTEST AT THE SODA COUNTER.

BY R. J. JENKINS,

Chief Soda Dispenser for the Central Drug Co., Detroit, Mich.

Let me describe a contest that is being carried on at our soda fountain with no little success. Suspended in plain view of our soda patrons is a sign:



Every Monday and Tuesday red stamps are given away by the soda clerks with every order. On Wednesday and Thursday white stamps are used, while on Friday, Saturday and Sunday blue stamps

are distributed. This completes an assortment of red, white and blue stamps.

At the end of thirty days, the woman who makes the largest flag out of stamps obtained at the fountain is given a complete toilet set. This is the first prize and consists of a brush, comb, nail file and polisher, scissors, and hand mirror, all contained in a pretty case. The woman who makes the second largest flag is given a complete manicure set about 6 by 12 inches containing a file, scissors, polisher, and similar accessories.

This scheme, of course, arouses a good deal of interest in the contest on the part of the soda patrons and brings business considerably beyond the cost of the prizes.

THE NEW HYNSON-WESTCOTT STORE.

The Well-known Firm of Prescription Pharmacists in Baltimore has Established a Handsome Branch to Extend its Business in the Realm of Legitimate Pharmacy—All Side-lines Eschewed and Prescriptions Made a Specialty.

It isn't necessary for us to say very much about the business in Baltimore of Hynson, Westcott & Co. Everybody knows by this time that these people have made a name for themselves in the line of truly professional pharmacy. Then, too, they were written up in this journal several years ago,* and



The building in which the new Linden branch of Hynson, Westcott & Co. has been installed. These attractive windows are used only for the exploitation of purely scientific or professional things.

since everybody in the drug world reads the BULLETIN—well, we are almost too modest to say that for this reason alone the druggists of the country certainly know all about Hynson, Westcott & Co.

Our object this month is merely to say that the firm has opened a new branch, and to reproduce two or three pictures showing views of this really unique establishment. The engravings speak for themselves for the most part, and it will not be necessary to add very much by way of explanation. As in the parent store, no side-lines of any sort or character will be carried. Not even cosmetics will be in stock. The fashionable woman who buys her

attractive complexion ready made will have to go elsewhere for flesh tints.

On the other hand, however, the new branch will have a full line of every drug, preparation, appliance, or necessity used in the treatment of disease. Such things as syringes, atomizers, douches, ice bags, night lamps, thermometers, dietetic products, sterilizers, pasteurizers, surgical dressings, and so on *ad infinitum*—these will be available in great variety and abundance. But of course the great specialty with Hynson, Westcott & Co. is after all their prescription business. This is the thing they pride themselves on, and they have worked it up to a very successful point.

The main store has always been located at the corner of Franklin and Charles Streets. The entire building of four stories and basement is employed, and in addition there is a separate warehouse which



The interior of the new branch shows the place to be very handsomely fitted up. The absence of the customary side-lines will be noted at once.

gives a combined floor space of over 4500 square feet, not counting the new branch. The latter is at the corner of Linden and North Avenues. This is a transfer point of considerable importance, and it taps a residence neighborhood of great possibilities. Intersecting car lines reach out to such suburban places as Walbrook, Forest Park, Park Heights Avenue, Arlington, and the like.

*BULLETIN OF PHARMACY, July, 1901.

Hynson, Westcott & Co. now employ 37 people altogether. In the main pharmacy, there are 8 pharmaceutical graduates, 4 assistant pharmacists, 3 finishers of pharmaceutical preparations, a receiving clerk, a delivery clerk, 2 bookkeepers, a stenographer, 2 janitresses and 6 porters and messengers. In the Linden branch are the manager, 3 graduates in pharmacy, a porter, and two messengers. The manager of the Linden branch is W. N. Owings, Ph.G., who has been in the employ of the firm for a good many years, and who will now share in the profits of the new store. The members of the firm are Henry P. Hynson, James W. Westcott, and H. A. Brown Dunning.

Establishing the Linden branch near a well-to-do residence neighborhood, Hynson, Westcott & Co. have sought to greatly increase their telephone order business. In a booklet gotten out to exploit the branch we find that patrons are urged to send in their orders over the telephone, and physicians are asked also to 'phone in their prescriptions. A com-

plete delivery service will be built up, and the firm hopes in this manner to reach out and corral business from quite distant points.



This is another view of the interior, showing more in detail the nature of the fittings and the decorative scheme. In the fixture at the right is the following legend: "Smoking objectionable."

THE IMPORTANCE OF THE PHARMACIST TO MANKIND.

An Address Delivered at the Celebration of the Twenty-fifth Anniversary of the School of Pharmacy of Northwestern University.

By OSCAR OLDBERG,
Dean of the School from 1886 to 1911.

This occasion belongs to Pharmacy.

I venture to call upon all Pharmacists present to begin here and now a vigorous campaign to compel full recognition of the great service rendered to mankind by the Pharmacist.

Such a campaign is urgently necessary and should have been begun years ago.

The public is ignorant of the fact that the Pharmacist is the sole agent to whom must be entrusted the enforcement of so much of the public health laws as relates to the drugs used in the practice of medicine. Let us try to remove that ignorance.

It is our right and duty to demand respect for the service rendered by our craft.

The campaign of education to secure acknowledgment of the importance of the Pharmacopœias, and of the work done by the specialists who carry them into effect, is evidently needed in every land.

This campaign may appropriately be begun in America.

The very life of Pharmacy depends upon the Pharmacopœias, and the Pharmacists of America have contributed much to make the Pharmacopœia of the United States respected.

All national Pharmacopœias are prepared and revised by physicians and pharmacists because they, only, are competent to perform that duty.

In our country the makers of the Pharmacopœia have rendered their services without compensation, and have presented to the American people a work which, considered as a whole, is the cleanest and best of its kind.

Let us explain to the public how the practice of medicine would be plunged into chaos in the absence of the national Pharmacopœias.

The Pharmacopœias are, in all countries, important parts of their system of protection of the

public health, and are, therefore, enforced as other laws are enforced—by the government and at the expense of the people.

But the governments have not told the people the reason of it. The Pharmacists must do that.

In our country the authority of the Pharmacopœia has been firmly established by the decisions of our courts for about half a century—thus long before the passage of the Pure Food and Drugs Act of June 30, 1906, to which many of our people ascribe the force of our national book of standards for medicines.

The actual condition of medicine and Pharmacy in the world cannot be discovered without studying the contents of the national Pharmacopœias. In this age men must widen their field of observation, and specialists in any land must learn what the workers in their field are doing in other lands.

Upon examination it is found that the national Pharmacopœias, whatever else they may contain, include the longest known and most thoroughly tested drugs and medicines. These drugs and medicines, having won and retained the approval of the medical profession, may be said to represent "the survival of the fittest." In that respect the Pharmacopœias are admirable.

But in view of their great and direct importance it is an astounding fact that no recognized or definite plan governing their construction seems to exist. The Pharmacopœias themselves furnish no evidence of it.

As Pharmacists we must protest against including in any national Pharmacopœia any drugs and preparations of such character that their presence in the book must compromise its dignity and scientific character.

As the Pharmacopœia of any country is, so will its Pharmacists be.

The national Pharmacopœias should contain no other remedies but such unmixed medicinal substances as are employed, singly or in conjunction with one another, by the medical profession.

But you will find that nearly all of the twenty national Pharmacopœias have, from generation to generation, continued to publish recipes for quack nostrums which men ought to know are used only by the very ignorant.

The national Pharmacopœias have come into existence within a century. Quackery was rampant and scientific medicine did not exist a century ago. You may say that such a positive assertion should

not be made by a mere Pharmacist, for it is not the function of the Pharmacist to pass judgment upon what constitutes rational medicine. But it is not necessary to be a cook to know that a recipe putting soap in a soup must be a failure.

Ridiculous nostrums put in the Pharmacopœias a century ago when actually employed by those who then practiced the art of healing are still retained in those books in this age of highly developed medical knowledge when physicians treat them with the contempt such rubbish merits.

The very titles given to some of these nostrums in the most recent Pharmacopœias serve as a warning somewhat as the sign of MEASLES nailed to the front of a house.

To men of sense these titles read: "Noli me tangere." Among them you will find "balm of life," "elixir of long life," "antiscorbutic syrup," "the prince's drops," and the like.

The history of "the prince's drops" is interesting. It is a solution of succinate of ammonium and the forerunner of "Spiritus Mindereri." (The spirit of Dr. Minderer has since been in purgatory and finally came out a clean solution of ammonium acetate.)

The original "prince's drops" was made of the ammoniacal liquor obtained by the dry distillation of deer's horn or of bones.

This liquor had a dirty brownish color, and its odor and taste were very offensive. Its alkalinity was neutralized with dirty succinic acid, which left the offensive odor and taste unimpaired. But a time came when these impure materials could no longer be found, and, as the ignorant people who had used "the prince's drops" as a household remedy continued to call for the preparation at the drug stores, and would not have been satisfied with an article not possessing the characteristics which to them constituted the best evidence of its curative powers, a new formula was devised for making the genuine "prince's drops" out of clean and pure ammonium carbonate and succinic acid by adding enough of the extremely offensive tarry distillation product of bones known in the drug market as "Dippel's animal oil."

This formula for a quite original imitation of the original article is still contained in several national Pharmacopœias.

One of the preparations contained in a national Pharmacopœia in force until 1908 had just 57 different ingredients—no more and no less—

while other national Pharmacopœias of earlier date order only 18 ingredients to be used in making that preparation, or one bearing the same title. We have heard the phrase "a distinction without a difference," but here is an instance of a difference without a distinction—quite inadmissible in medicine.

I am smarting in anticipation of severe criticism by friends who will tell me that it will never do to undermine due respect for the Pharmacopœias by stating such facts as these. I can only reply that they are facts, that I am not trying to undermine respect for the Pharmacopœias but the very opposite, and that I am convinced that the evil described, which is already of nearly a century's standing, will be most speedily eradicated whenever the friends of scientific medicine and Pharmacy abandon their silence and begin to discuss it.

If you should ask how it can be that scientific matter of the highest order is mixed up with old quack nostrums, the only explanation I have been able to discover is the pernicious notion that the Pharmacopœias exist solely or chiefly for the benefit and business convenience of the druggist. Were this true the Pharmacopœias could not be prepared and published at the expense of the people.

But the notion is as old as the Pharmacopœias themselves and has been tolerated without interruption out of pure inattention.

The practicing physician who notices the presence of the formulas for nostrums probably passes it over because he does not feel specially interested in remedies which he would not think of using, and so the whole matter is regarded as a harmless concession to the wishes of the druggist.

But I have found that whenever this view of it is brought to the attention of a right-minded druggist he wakes up and indignantly resents and repudiates it. Why, indeed, should he want any nostrums in his book of books?

One of the great objects of the national Pharmacopœias, in conjunction with other codes of laws and regulations relating to medicine and pharmacy, is that of rendering important drugs and medicines promptly procurable when needed. This is effectively accomplished in most countries by various means.

One of the means employed to that end is the classification of pharmacopœial remedies into two groups, one of which comprises the "obligatory" medicines which all Pharmacists must keep in stock

at all times, the other group comprising the "optional" medicines, which are valuable but which the Pharmacists need not keep on hand unless notified to do so. An optional remedy becomes obligatory whenever some physician tells the druggist that he wants to use it. Remedies which are obligatory without such special notification are indicated by an asterisk or other sign placed opposite their titles in the body of the Pharmacopœia, or are enumerated in a separate table at the end of the book.

Comparisons of the obligatory and optional remedies are interesting. You will find, for instance, that, before the advent of the iceman, physicians who found crushed ice a necessary remedy but not easily obtainable had it put into the Pharmacopœia as one of the obligatory articles. But it was decided that ice-bags required the use of beef bladders to hold the ice, and at least one national Pharmacopœia still includes beef bladders along with the obligatory remedies. When we remember how difficult it is to secure the exclusion of any article once admitted into the Pharmacopœia we are not surprised to find that beef bladders are still official, and can understand why ice is retained in several Pharmacopœias although it has long ago become a household necessity, and icemen and rubber bags are easily found.

Some national Pharmacopœias make tooth-powder or tooth-paste obligatory, together with kitchen spices, and other merchandise never ordered by physicians but sold at the drug stores.

Another of the means by which necessary medicines are made promptly procurable is the system by which the Pharmacies of continental Europe are made to yield a reliable and sufficient life income to their owners. The Pharmacies are limited to the number actually required according to population. It is reasonable under such a system to require the Pharmacies to be well stocked with all the obligatory remedies, but in our country this method is impracticable.

It is by no means impossible in our country to prevent the increase of Pharmacies beyond the number which can be profitably conducted in a manner compatible with the best technical service to the people, but this question must be settled by the Boards of Pharmacy. Our lawmakers are sometimes slow to admit that they cannot possess sufficient special knowledge of each and every subject upon which they must legislate, but valuable in-

formation and advice can always be obtained such as may render intelligent and effective legislation practicable.

All legislative proposals relating to Pharmacy should originate with the Pharmacy Board, for that Board represents the people of the State, and the State must make the practice of Pharmacy safe and efficient and at the same time do justice to the Pharmacist.

The great majority of men love fairness. We say, therefore, ignore those who make it their busi-

ness to amuse fools with the stale and cheap joke about the extortionate prices charged by the druggist. Intelligent men may be easily shown that the dispensing Pharmacist's individual responsibility and sense of duty, his personal character, skill, training and experience, and the protection which these guarantee to the sick—these, and not "cut rates," are the things which the public must take into account when they choose their Pharmacist.

A faithful Pharmacist is ever on guard and gives the public the full benefit of his special knowledge.

A WINDOW DISPLAY OF DIP.

The accompanying illustration of a window trim used by the Elam Drug Co., of Henderson, Ky., will serve to show what efforts many druggists are making to corral the dip business. It is notorious that the grocers and hardware dealers, particularly

pay the druggist. As a matter of fact the line is one of the most profitable a druggist can carry.

The Elam Drug Co. have a big window and use it to the utmost at this season. The glass is placarded from the floor to the ceiling with ads. of



in the country, carry coal-tar preparations, but the trade properly belongs to a pharmacy. Druggists in stock-raising localities should carry a stock of dip and let the people know it. If it pays the butcher, the baker and candlestick maker to sell dip, it will

a parasiticide. Pictures of cattle, sheep, horses, dogs and poultry are used profusely. The parasites themselves are illustrated on the signs, while stock packages of their arch enemy, dip, are displayed in abundance.

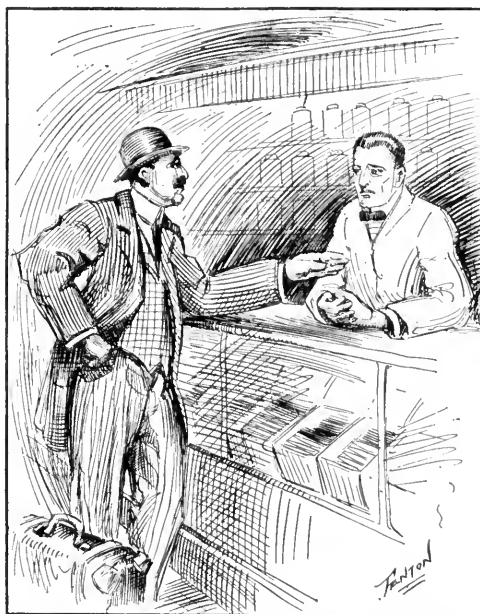
"MY MOST EXCITING EXPERIENCE."

A Druggist Narrowly Escapes Being Brained by a Tough Customer—A Jeweler Takes the Cyanide Route to Death.

LEMON SOURS AND THE BIG STICK.

By GEORGE H. ORSOR, ALBANY, NEW YORK.

When I received my certificate as a registered pharmacist, I was not the only one that was "de-lighted;" for the next day the proprietor packed his grip and said that he was going away for a few



"The proprietor said he was going away for a week."

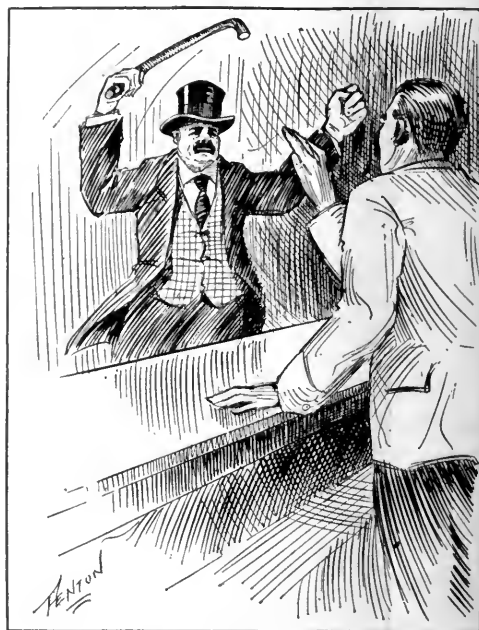
days and perhaps a week. He hadn't had a vacation for years and thought it about time for him to take a rest. He hoped everything would move along smoothly, and it did excepting the second day of his absence. That furnished enough excitement to last me the rest of the week.

I remember it was a holiday, for I did not get down to the store until eight o'clock, and I had just opened the doors. In came my first customer, a large man with a nice black suit, a high hat, and a stout cane. He looked to me like a respectable shoemaker or blacksmith dressed up for a day's outing. He acted rather ugly when he came in, and I thought that he had taken an "eye-opener" or two. Stepping up to the soda counter he asked for a lemon sour, which I gave him. Then he walked over to the cigar case and asked for a

cigar, and he got that. He stood looking out of the window for a moment or so, when he ordered another lemon sour. He drank that, every drop of it, and here is where the curtain rises. He deliberately turned the holder upside down, about two feet above the counter, and let the glass drop out of it. As the marble slab was harder than the glass, you can imagine the result.

That made me mad, and I demanded: "You pay for that glass." "I won't," he replied, "and nobody can make me."

Just then a lady came in, and I had to leave him to wait on her. While I was thus engaged the junior clerk came in and went behind the soda counter for something. The big man stepped up to him and asked for a lemon sour. While he was drinking it the lady went out, so I went over to the soda counter. The man had just laid down a



"He went for me with his big stick."

quarter on the slab. The clerk picked it up and put it in the drawer. I told him that was right—there was no change coming, for that was what the man owed.

Thereupon the stranger went for me with his big

stick. I kept dodging him and moved toward the front door to see whether I could find a policeman or a friend to help me out of my dilemma. When I got to the door and was looking out, the man raised his big stick and was just about to give me a rap on the back of the head when a friend of mine came to the side door, took in the situation, and called out "Here, what are you doing there?" We both glanced around. The man lowered his cane and shot down the street as if the devil were after him.

"That was the closest call that you ever had in your life, Doc," said my friend. "Another second and he would have knocked you senseless, and we should have had to summon the proprietor home and spoil his vacation." I guess he was right.

A CYANIDE SUICIDE.

BY HERMAN B. MOORE, MAURY CITY, TENN.

About three years ago, late on a Saturday after-

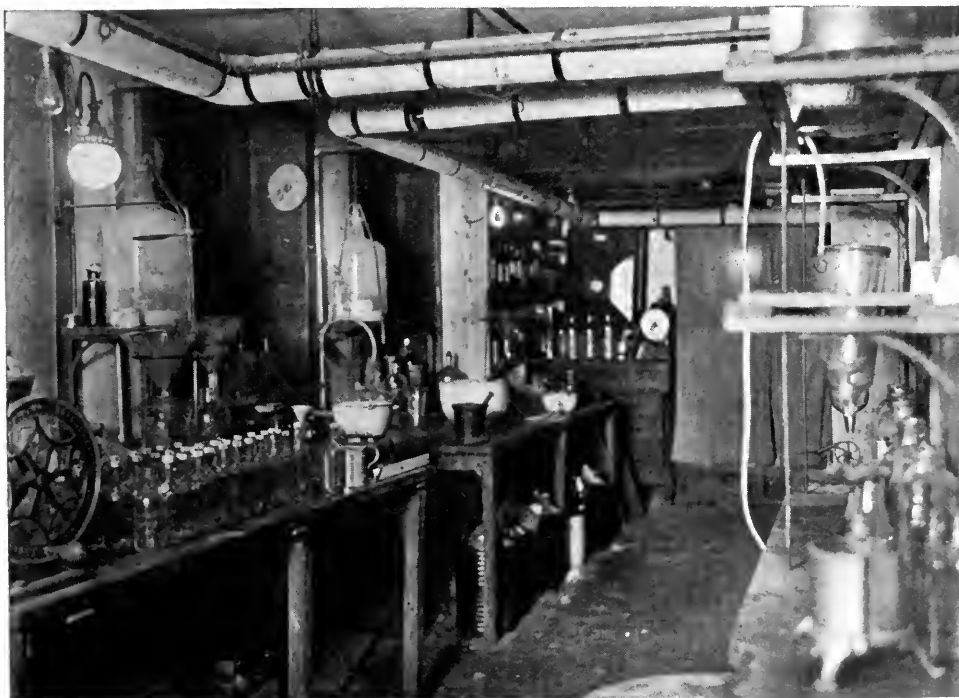
noon, a man staggered into the store, and from his manner I judged that something unusual was wrong with him.

He began waving his arms and to issue a series of guttural sounds from which I presently understood that he wanted a "Doctor." I offered him a chair, but he pushed it aside and sat down on the floor, and proceeded to have what I thought was a fit.

Soon some one rushed in and said: "The man swallowed some of the stuff which he cleaned gold with." I at once thought I knew what he had taken, so I hurried around and got an antidote; but he died before I could get his mouth open.

He was a jeweler. I learned later that he had taken a large quantity of a solution of potassium cyanide which he used to restore gold and silver articles.

Whether he drank the poison on purpose or through mistake, no one knows. A bottle of whisky was found beside the cyanide solution.



A RETAIL DRUGGIST'S LABORATORY.—It might well be expected that a scientific man like Dr. C. B. Lowe, Professor of Materia Medica and a few other things in the Philadelphia College of Pharmacy, would have an adequate laboratory in connection with his pharmacy out in Germantown. This picture of the room is a flashlight taken by Dr. Lowe's son. Among other things it would seem from the table at the left that Dr. Lowe has a pretty good trade on effervescent solution of magnesium citrate.

DRUG-STORE SKETCHES.

THE TALE OF A DRUG CLERK.

BY MAXWELL BUKOFZER.

'Twas once upon a time there lived
 A drug clerk, young and willing,
 Into whose soul drug journals were
 Much "secret work" instilling.

Their expert and adept advice
 Most faithfully he studied;
 For Jim was piously convinced,
 That progress it embodied.

Confiding in this printed lore
 As in his godly Father,
 Jim ambled forth in search of work,
 A sustenance to gather.

He met with Mister Shake-it-up,
 Who offered a position.
 Jim started, mindful of the "Don'ts"
 And other erudition.

He labored hard, but lo! one day
 Poor Jim was asked to wander:
 "You do not shake things! You're too slow!
 We have no time to squander."

Jim called on Mister Do-it Right.
 He got the situation.
 Here he began his daily task
 With vim and animation.

Some moons had waned when once again
 James got his walking-letter.
 "You're superficial," growled the boss;
 "Do less and do it better."

Jim went to work for O. Chattap,
 Improved by former errors.
 Now neither speed nor thoroughness
 Bedimmed his heart with terrors.

The customers to please he strove,
 With brilliant conversation.
 Alas! most fatal of mistakes!
 His tongue lost him his station.

Next Jim at Mister Tell-a-joke's
 His daily bread got buttered.
 And there he vowed a fearful oath
 To choke each word ere uttered.

"Great Scott!" wailed Tell-a-joke at last,
 "I'm not a joke a-telling:
 You're either dumb or else a dope,
 With us you can't be dwelling!"

On Jimmy passed to Shabbycloth,
 Who had no use for col.lars.

Quoth he: "How can you dress so swell
 On measly fifteen dollars?"

Thereon in simple garments clad
 He clerked for I. M. Showy,
 To whom Jim's apparel seemed
 Distressingly scare-crowy.

When Jim at Pat. N. Stuff's prepared
 Some simple tussis-mixtures,
 The boss called him a quack and cried:
 "Sell things right from the fixtures."

This warning burnt into his mind,
 At Own Make's Jim ne'er tired
 To sing the nostrum's praises, until
 He suddenly got fired.

Thus Jim went onward pace by pace,
 Wholesale as well as retail.
 He mastered every subtle point
 Down to the smallest detail.

He learned just how to speak, to eat,
 To dress, to work for others,
 And he became a "model" boy
 For daughter-laden mothers.

He wed. The dowry he received
 Consisted in her freckles.
 Then he bethought himself that he
 Should now earn twenty shekels.

He got them. Dubbed now "manager,"
 Six months he had no Sunday,
 And as reward was given the
 Consilium abundi.

"You see," the boss explained, "it's this:
 "My trade has got a notion
 "That you alone are fit for them
 "To compound pill or potion.

"To-day a lass refused to buy
 "Of me a kidney-plaster.
 "She asked for you. Now, why should I
 "Play servant where I'm master?"

Jim went—and for a little while
 Went wild besides. Who wonders?
 He cursed melodiously at fate,
 And made three awful blunders.

First he got drunk. When wifey's ma
 Stopped him from cutting capers,
 He next—ye gods!—tore into shreds
 His drug journals and papers.

Lastly—it's terrible to tell—
 He who had been so clever,
 Equipped a store with trifling coin,
 And now slaves worse than ever.

BOARD QUESTIONS ANSWERED.

AN ILLINOIS EXAMINATION.

PHARMACY.

(Continued from April BULLETIN.)

5. Why should not a tin percolator be used in making fluidextracts of nux vomica, conium, and sanguinaria? (a) Why is a conical percolator generally used? (b) Why should the drug at the bottom of a percolator be packed more loosely than at the top of it?

Tin percolators cannot be used for any drugs containing principles liable to be affected by metal, or to be exhausted with acid menstrua. Of course, these three drugs are made with an acetic acid menstruum. (a) The drug has a tendency to swell, and there must be allowance for lateral expansion of the moist content. (b) The fluid draining down from the top is already concentrated on reaching the bottom of the percolator and there must be room to let it pass out. Furthermore, the weight of the top layer of drug exerts a pressure on the lower; so the drug at the bottom of the percolator is packed loosely to offset this pressure.

6. What is clarification? (a) How is it affected by the application of heat? (b) What effect has albumen in the process of clarification? (c) Why does fermentation sometimes clarify a liquid?

Clarification is the process of separating from liquids, without the use of filters or strainers, solid substances which interfere with their transparency. (a) When a viscid liquid is heated, its specific gravity is diminished, and frequently particles which were suspended in it and interfered with the transparency of the liquid will separate, the heavier ones falling to the bottom and the lighter ones rising. In the latter case, ebullition facilitates the separation; the viscid particles becoming enveloped in the minute bubbles of steam, rise through their buoyancy, and a scum is formed which may be readily separated. (b) The albumen coagulates, enveloping the particles that render the liquid cloudy. (c) The changes in the composition of juices after they have been fermented usually lead to the deposition of those substances which previously interfered with the transparency of the juices; the generation of alcohol through fermentation produces a liquid in

which the substances are insoluble, hence the formation of a deposit. The albuminoids in the juices are coagulated by fermentation.

7. How many pint containers will be required to hold 75 troy pounds of ether specific gravity 0.716? (a) How many to hold 75 avoirdupois pounds of glycerin specific gravity 1.246?

$5760 \times 75 = 432,000$ grains. One fluidounce of water at 62° F. in air weighs 455.382 grains. Hence $(432,000 \div 455.382) = 948.61$, the number of fluid-ounces occupied by 75 troy pounds of water. $948.61 \div 16 = 59.288$ pint containers needed for 75 troy pounds of water. $59.288 \div 0.716 = 82.844$ ans.

$75 \times 7000 = 525,000$ grains $(525,000 \div 455.382) \div 16 = 72.0548$, which $\div 1.246 = 57.828$ ans.

8. Give the formula and process for making unguentum hydrargyri. How is the percentage of mercury present determined?

Mercury	500 grammes.
Oleate of mercury.....	20 grammes.
Prepared suet.....	230 grammes.
Benzoinated lard.....	250 grammes.

Triturate the oleate of mercury in a warm mortar, add the mercury gradually by means of a pipette, and when the globules are completely divided and distributed, set it aside for about fifteen minutes. Melt the lard and suet, allow the mixture to partially cool, and add about 25 grammes of it to the mercurial mixture, and continue the trituration until globules are no longer visible under a lens magnifying ten diameters. Then add the remainder of the lard and suet and mix thoroughly.

To assay mercurial ointment, weigh ten grammes of it in a tared dish, melt it, then remove it from the fire and add 50 Cc. of warm petroleum benzin. Stir the mixture well, allow the mercury to settle completely, and decant the petroleum benzin. Wash the residue with successive portions of 10 Cc. each of warm petroleum benzin until it is entirely free from fatty matter, carefully retain all the separated mercury in the dish, and allow all traces of benzin to evaporate. Add to the residue 10 Cc. of diluted hydrochloric acid, heat it gently, and stir with a glass rod until the mercury collects in a globule. Pour off the acid, warm the mercury with a little distilled water, dry the globule on bibulous paper, and weigh. The mercury should weigh not less than 4.9 grammes.

9. What causes the discoloration sometimes present in tablet triturates of calomel and soda? Does such discoloration impair their value?

The tablets absorb moisture and there is a re-

action between the ingredients with the formation of black mercurous oxide. This does not impair the medicinal value of the tablets as the same reaction takes place in the stomach.

10. What is the distinction between ointments and cerates? (a) Why should an ointment having a trace of rancidity be rejected? (b) Why is petrolatum regarded as a good base for ointments in certain cases?

Cerates differ from ointments in containing a considerable proportion of wax, and frequently also rosin or oleoresinous substances. They are harder than ointments and do not liquefy at the temperature of the body. (a) A neutral oil is bland and inoffensive in smell, while fatty acids are irritating to a tender, excoriated surface and are also vile in odor. Moreover the acid may tend to decompose the ingredients. (b) Some ointments are intentionally non-absorbable, being used to produce some medicinal effect on the outer skin, such as astringent, counter-irritant, antiseptic, germicidal or similar effect, or possibly as protective agents. These may be made with petrolatum as it is less readily absorbed than, say, lard or lanolin. Moreover, it never gets rancid.

11. Name ointments in which a metallic spatula should not be used and give the reason for same. (a) Why is paraffin an objectionable substitute for wax in ointments?

Whenever substances likely to attack metal are ordered in ointments, the incorporation with the fatty vehicle should never be made with steel spatulas, but always with horn or rubber spatulas; the latter can now be had quite pliable, and are admirably adapted for ointments containing salicylic acid, tannic acid, iodine, mercuric chloride, oxides of mercury, etc. (a) Paraffin is apt to granulate. It does not produce so smooth an ointment as wax.

12. Why does the Pharmacopœia direct that digitalis leaves be used instead of a fluidextract in making infusion of digitalis? (a) What active principles are contained in the finished product?

Digitoxin and other objectionable principles soluble in a hydroalcoholic menstruum are absent in the infusion made from the leaves with water; but they are normally present in the fluidextract made with diluted alcohol. (a) Chiefly digitonin and digitalin.

13. Why is purified talc used in making official waters? (a) What advantage has it over calcium phosphate in making medicinal waters? (b) What

objection is there to the use of magnesium carbonate?

Thorough trituration with an insoluble powder causes division of the oils into minute particles, in which condition they are readily dissolved by water. (a) Calcium phosphate is not a good medium for division of the oils, and is frequently found impure from contamination with soluble matter. It favors the growth of germs and molds. (b) Magnesium carbonate is not desirable, as it is not wholly insoluble, and this fact has often given rise to trouble, as in the case of cinnamon water, which invariably has a yellow color when made with this agent, and in the case of mixtures of medicated waters with lime-water magnesium carbonate produces turbidity. It precipitates alkaloids also, which is one of the main objections to it.

14. How is aromatic spirits of ammonia prepared? (a) What is required in the selection of the ammonia used? (b) Why must the product be set aside twenty-four hours before being filtered?

To the ammonia water contained in a flask, add the greater part of the water, and afterwards the ammonium carbonate reduced to a moderately fine powder. Close the flask and agitate the contents until the ammonium carbonate is dissolved and allow it to stand a half day. Pour the alcohol into a graduated bottle of suitable capacity, add first the oils, then gradually the solution of ammonium carbonate, and afterwards enough water to make up the required volume. Set the mixture aside for a day in a cool place, occasionally agitating, then filter it through paper in a well-covered funnel. (a) Have a translucent ammonium carbonate. (b) A white crystalline precipitate often falls when water is added, which disappears on standing.

15. Of what are Seidlitz powders composed? (a) Why are small wooden measures used for measuring these powders objectionable? (b) What quantity of material will be required to make one dozen of these powders?

Sodium bicarbonate, potassium and sodium tartrate, and tartaric acid. (a) As a rule they are not uniform. (b) Sodium bicarbonate 31 grammes, potassium and sodium tartrate 93 grammes, and tartaric acid 27 grammes.

16. What is the official title for sweet spirits of nitre? (a) Of what is it composed? (b) How should it be kept in stock, and why is it necessary that the caution be observed? (c) For what purpose is sodium and potassium carbonate employed?

Spiritus Aetheris Nitrosi. (a) An alcoholic solution of ethyl nitrite containing not less than four per cent of the ester. (b) In small, well-stoppered, dark amber-colored vials in a cool place remote from lights or fire. It tends to decompose. (c) The former to neutralize the acid present, the latter to remove traces of water.

17. Why should bismuth subnitrate and a carbonate or bicarbonate not be prescribed in aqueous mixture? (a) Why should antipyrin not be given with calomel?

In the presence of water the alkali carbonates and bicarbonates convert the bismuth into the subcarbonate, and at the same time some carbon dioxide is liberated. (a) In the presence of moisture calomel is slowly turned dark by antipyrin. The calomel is reduced.

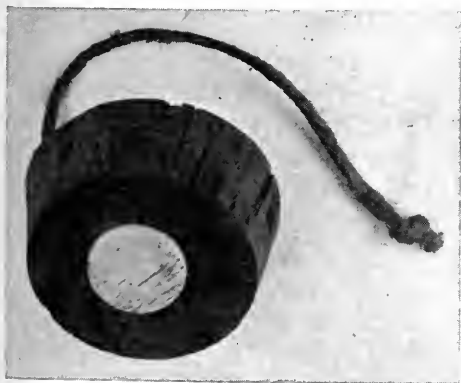
(To be continued.)

DOLLAR IDEAS.

The editor of the BULLETIN will pay \$1 in cash for every practical idea accepted for this department. What is wanted are good formulas, dispensing kinks, book-keeping suggestions, business plans, advertising schemes, new soda drinks, and everything else of a novel and useful nature.

TO UNCORK BULK BOTTLES OF PILLS AND TABLETS.

Frank J. Kersenbrock, Columbus, Nebraska: Very often pills and tablets in lots of 5000 come put up in wide-mouth bottles and are invariably stoppered



with thin corks which fit flush with the top of the bottle. Unless these stoppers are replaced by larger corks that stick out above the lips of the bottles one must use a corkscrew every time he wants to take

out 10 cents' worth of pills. This is a waste of time and also wears out the cork. Try this:

Put a hole through the center of the cork, tie a string around the neck of a collar button and pass the smaller end through the bottom of the cork as shown in the accompanying illustration. In place of using a bone collar button an ordinary button will do. If one does not want the end of the string to stick out away from the bottle, a shoe button can be used at the end instead of the knot as on my model. Then the string will hang down alongside the bottle.

In putting the cork into the bottle it should be so placed that the string will hang out. To open the container just pull up the string and the cork will come out with ease.

OPENING STRONGER AMMONIA WATER.

A. Lomax, Adelaide, Cape Colony: This is an idea I thought of only lately. Had it occurred to me before, it would have proved very useful to me during these years in opening containers of stronger ammonia water.

Wrap a wet towel around the bottle and set the container outside in the shade for at least half an hour, keeping the towel constantly wet. The ammonia will not rise out of the bottle. But as a safeguard it is always advisable to turn one's face away from the bottle on opening it, at the same time leaving the towel over the stopper. When an apprentice I saw a man open a Winchester of stronger ammonia water on the serving counter. It was a hot day and the ammonia rushed out of the bottle. We ran to the nearest door to the air. When we were able to return to investigate, we found that instead of containing half a gallon, the package contained only half a pint.

GETTING BUSINESS ON RAT VIRUS.

Andrew F. Reinders, Mt. Pulaski, Ill.: We had been selling Azoa with indifferent success, but finally hit upon the following plan: Catch a few rats in a wire cage-trap and feed them on nothing but the Azoa mixture for a few days. Then turn them out of the trap or set them free so that they may return to their former associates and mingle with them. In this way they communicate the disease to their fellow rats and the results are soon apparent.

LETTERS.

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THE TEN-HOUR DAY.

To the Editors:

In the evolution of the science of pharmacy—and we must all allow that the scenes and conditions, in the practice of the art, are rapidly changing at the present day—I am inclined to wonder much; and ask my brother pharmacists what the end is going to be, especially for the smaller pharmacy in the cities and towns, where only the proprietor and one clerk are needed to run the store, with the aid possibly of an errand boy.

The question has been more forcibly brought to my mind recently by the flood of legislation that has in the past two or three years been introduced into the various State legislatures, regulating and restricting druggists and drug stores in nearly everything they do, from early morning until late at night.

I will acknowledge much of this legislation was needed. The pure food and drugs law, the restrictive measures in regard to the sale of cocaine, morphine, opium, etc., belong to this class.

One measure in particular, that is before the present Connecticut legislature, I am opposed to and think every other pharmacist ought to be also, and the attention of pharmacists generally ought to be called to it, as it is liable to spread through every State in the union unless vigorously opposed. I refer to the so-called "sixty-hour-a-week" drug clerk bill. This bill provides that no prescription clerk shall be employed more than ten hours a day or sixty hours a week, under a penalty of a \$500 fine. I understand this measure or a similar one is already a law in California; I believe it is also before the Massachusetts legislature.

Now, imagine please what would the proprietors of the vast numbers of drug stores in this country do, who are able to employ only one prescription clerk, if that clerk were permitted by law to work only sixty hours a week?

Let us suppose the average working hours in a drug store are 100 hours a week, which I think are a fair average. This proposed law means that the

clerk will only be on duty 60 per cent of this time. The remaining 40 per cent, or nearly half the working hours, the proprietor will be left alone. Now, how is the proprietor of that store going to arrange the working hours of that clerk, on a ten-hour schedule, so as to have him working during the busy hours of the day when he needs him most, or how is he going to get any help from him evenings or Sundays? I claim it is impossible to so arrange it.

I am opposed to this measure, not that I am against shorter hours for drug clerks, but that I think sixty hours is unreasonable under existing conditions.

One of the arguments used in favor of this bill is that the drug clerks are subject to long hours and are overworked, thereby becoming liable to make mistakes and errors. I claim that the average clerk is not overworked. He is not in the same class with the man at the bench in a shop or factory, forced to work at high tension to get out a certain amount of work, in order to get a day's pay. Instead, he has many leisure moments in which to chat with friends, read the papers, or relax if so inclined.

I doubt whether this proposed law is constitutional, or can be enforced, if vigorously fought by the drug trade. A similar law was recently enacted by the New York legislature, limiting the number of hours a man could be employed in a baker shop. When contested in the courts, the New York Court of Appeals held it valid, while the United States Supreme Court reversed that decision. Now, if the law regulating the working hours of bakers would not hold, it follows it would hardly hold as regards drug clerks.

It seems to me the hours a clerk works should be a matter of adjustment between the clerk and his employer, taking into consideration the local conditions in that particular store, the class of trade catered to, the amount of business transacted, the work expected of a clerk and the salary paid.

If drug clerks generally favor this sixty-hour law and it is put into effect, I can see where the clerk comes to work like any shop or factory employee, registering in on the time-clock when he goes to work, registering again when his day's work is completed, getting paid by the hour instead of the day or week; if he loses any time from sickness or vacations, he loses his pay also.

So, all things considered, I feel this sixty-hour

law is ill advised, both for the welfare of the clerk and the proprietor too, and I hope druggists and clerks both will endeavor to defeat this measure, whenever and wherever it comes up.

Bristol, Conn.

BURTON L. BENNETT.

[NOTE BY THE EDITORS.—We shall be glad to hear from the clerks if they have any views to offer on this subject.]

BOOMING THE SPRAY BUSINESS.

To the Editors:

I am getting four monthly drug journals and have failed at any time to see any letters or editorials pertaining to spraying material or insecticides, such as are used for spraying fruit trees.

There is no question but that this is a line of trade that should go directly to the drug store. All these articles are of a poisonous nature and can be dispensed by druggists in broken or original packages to a decided advantage over other dealers who must sell in original packages only. The druggist should post himself thoroughly along this line of work to advise his clients intelligently what to use, how to use it, and when. This information can be had from experimental stations or chemical manufacturers of spraying material.

The insecticide trade is offering to-day one of the biggest opportunities to the drug trade of anything that has presented itself for the past 25 years. One of the largest paint manufacturers recently announced at their directors' meeting that it will be but a short time before his insecticide line will be so big that his paint business will be a side issue. And to verify this he is spending over half a million dollars in equipping plants in three branches of his house.

Now, fellow druggist, what are you going to do? Will you let this business get away from where it belongs and let the other fellow gather it in? The field is so big you cannot afford to let it pass by. Get into position to talk spraying and insecticides intelligently. Go after the spray business and go after it hard. Along with this line handle all accessories, such as spray pumps, etc. This is no advance thought, but now is the opportune time.

Why have the drug journals not taken this matter up? They surely are educators and many druggists look to them for advice and new ideas. This line is so extensive that the journals could devote a separate department to it. Would it pay them?

Most assuredly. Let them show an interest in this work by bringing it before the druggists by letters or editorials and see how soon the manufacturers will place contracts for advertising space for their products. Let the journals give the druggists a little solid food, instead of a lot of windy, indigestible board meeting minutes.

About one year ago lime and sulphur and arsenate of lead was not used here. I started to talk insecticides and spraying, gave out literature to fruit growers, had my mailing list used by insecticide manufacturers. At the present time the indications are that business in this line will exceed all other side-lines combined. This is new business, business the other fellow would have gotten.

Let this be taken up by the druggists in letters to the journals, and have the journals meet them halfway.

O. W. WINKELPLECK.

Sugarcreek, Ohio.

THREE OR FOUR SUGGESTIONS.

To the Editors:

Permit me to say that I certainly had a dollar's worth of fun, not to mention several dollars' worth of splendid ideas, from your March BULLETIN, which came in Sunday when I was so indisposed with a cold as to be confined to the house all day.

In your Dollar Idea department for March, page 119, I note a new preparation for rose-water. In my own formula, I use attar of rose in place of the rose extract, 24 minims to the gallon, triturate it with the powders, and add boiling hot water and filter. This makes an excellent rose-water free from alcohol.

I have prepared a toilet lotion of quince seed, witch-hazel, etc., very similar to the formula given by R. L. Dixon on page 125 of the March issue and have enjoyed a nice sale on it for several years. I color it violet and use a violet-trimmed label, naming the preparation "Violet Cream Lotion." I have one customer who has moved away and who orders a dollar's worth of the lotion every fall to be expressed to her home in Dakota.

A customer called one day saying he wanted something and could not remember the name, but it sounded something like "Sally-hit-the-path." I wrapped up a package of sal hepatica, and I think Sally hit the path all right!

D. A. FRICK.

Audubon, Iowa.

PRICING A BULK PRESCRIPTION.

To the Editors:

In the BULLETIN OF PHARMACY for March, 1911, page 126, appeared a prescription together with a discussion of the price:

Strychnine sulphate	16 grains.
Sol. arsenic chloride.....	3 ounces.
Quinine sulphate.....	640 grains.
Tr. of iron,	
Glycerin, ää.....	1 pint.
Aqua, q. s.....	4 pints.

In regard to the price on that particular prescription I will say that both contributors are wrong in the prices which they give. Whenever a formula of such nature is brought into my store, I consider the following important facts:

1. Any patient that has a prescription for $\frac{1}{2}$ gallon will surely try to buy it as cheaply as possible.

2. In cases where the formula calls for more than 500 Cc. it is advisable for the pharmacist to consider himself as a business man and not as a scientific man.

3. There is no doubt in my mind that the patient is entitled to a close price. I cannot see, though, why a man who buys a half-dozen should get the same price as the man who buys a gross or more.

Therefore in such cases cost price of articles should be figured and a certain per cent added for profit, thus:

		Cost.
Strychnine sulphate	8 grains=	8 cents.
Soluble arsenic chloride.....	3 ounces=	5 cents.
Quinine sulphate	3 grains av.=	26 cents.
Tincture of iron.....	1 pint=	45 cents.
Glycerin (sp. gr. 1.25).....	1 pint=	33 cents.
Bottle	=	25 cents.

Approximate value—\$1.42 cost.

Now, $100:50::142:\times=71c.$

\$1.42
.71

\$2.13

Therefore, I think if a druggist would charge for this prescription \$2.25 or so, when he would make a profit of about 52 per cent, he ought to be satisfied, and the patient likewise. The customer would surely call again in the same store to buy some other drugs, when the pharmacist could charge enough to compensate him for the half-gallon dispensed so cheaply.

RICHARD M. ALTMANN, PHARM.D.

Dorchester, Mass.

PAPERS FOR THE A. PH. A.

To the Editors:

Would it be possible for you to include a short note in the next issue of the BULLETIN OF PHARMACY requesting persons interested in the Section on Education and Legislation of the A. Ph. A. to notify me if they will prepare a paper for the Boston meeting in August?

It seems rather difficult to get people interested even to the extent of a promise of a paper. An invitation to prepare a paper inserted in your journal may catch some one whom I would not reach by letter.

CHARLES W. JOHNSON,

Chairman Section on Education
and Legislation, A. Ph. A.

School of Pharmacy, University of Washington, Seattle,
Washington.

THE OLD MAN WOULDN'T PAY IT!

To the Editors:

We are sending you one of our monthly statements returned from a customer with a very inter-

"Our Fountain Drinks Are Better"

Richland, Texas Dec 28 1912

M A W

In Account With

The Brown Drug Co.

Exp 1st To Large Picture 50
by June

This boy is 21 years old
and if you want your
debt collect them and
don't be bother me pay
back on debt and all for cash
I don't want
C W

esting notation on it. Good advice, don't you think? Is this good enough for your department of "Letters" in the BULLETIN? W. P. BROWN.

Richland, Texas.

HIS OPINION.

To the Editors:

In response to your recent request that readers tell what they wanted or expected in the BULLETIN, I will say that your new department of "General Essays" is a good one and I hope to see the depart-

BUSINESS HINTS.

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

One Way to Sell Borax.—

The average druggist will sell a box of borax for 5 or 10 cents, and be satisfied with a small sale. George B. Evans, the owner of five or six big drug stores in Philadelphia, gets up a handsome package, puts in a little violet odor, and has no trouble in getting 25 cents. We are reproducing the label used on the Evans container. The cut fails, however, to give



any idea of the beauty of the design. In the original the violets are printed in color, and the work is so well done that they look like real flowers. The paper is roughened to heighten the effect. All of which goes to show that these big druggists, who are popularly supposed to be cut raters and doing business at a small margin, know how to make more money than the rest of us.

An Array of Show Cards.—

J. M. Ciechanowsky, of Manistee, Mich., is quite adept in the art of sign painting. Some of his work is reproduced in the accompanying illustration. If, in photographing the



show cards, they had been set up against a plain background, preferably a dark one since the cards are light, better justice would have been done to the subject.

A Full-page Newspaper Ad.—

Not often does a druggist use a whole page in the newspaper. Recently, however, the *Daily Gate City*, published in Keokuk, Iowa, had such an ad. which had been inserted by

TWO BIG STORES ESTABLISHED 1856 TWO BIG STORES

TO BUY HERE IS TO BUY WISELY

To have the satisfaction of CHOOSING from the Largest Stocks of Drugs and Drug Sundries in Keokuk.

Better Values—Better Service—Better Stocks—Satisfied Customers

Wilkinson & Company **J. F. Kiedaisch & Son**

Keokuk's Biggest, Best and Best Drug Store *Drugs, School Books and Stationery*

422 Main Street Cor. Main and Eleventh St.

BRING Prescriptions Here We will fill them for you at the lowest price and will also dispense all the latest and most reliable medicines at the lowest prices.

OUR GUARANTEE We guarantee to give you the best value for your money. If you are not satisfied, we will refund your money.

These Two Stores Stand for Quality. We guarantee to give you the best value for your money. If you are not satisfied, we will refund your money.

DEVOL Paint We have the best paint in the world. It is the only paint that will stand the test of time. It is the only paint that will stand the test of time.

Whiting's Vulcan Set Brushes We have the best brushes in the world. They are the only brushes that will stand the test of time. They are the only brushes that will stand the test of time.

Star-Kalsomine We have the best kalsomine in the world. It is the only kalsomine that will stand the test of time. It is the only kalsomine that will stand the test of time.

Johnson's Artistic Wood Finishes We have the best wood finishes in the world. They are the only wood finishes that will stand the test of time. They are the only wood finishes that will stand the test of time.

John W. Mearns & Son's Pure Colors We have the best colors in the world. They are the only colors that will stand the test of time. They are the only colors that will stand the test of time.

SPRATT'S Dig Cakes We have the best dig cakes in the world. They are the only dig cakes that will stand the test of time. They are the only dig cakes that will stand the test of time.

SANTOL We have the best Santol in the world. It is the only Santol that will stand the test of time. It is the only Santol that will stand the test of time.

J. Albert Kiedaisch, a local druggist. We reproduce it showing various things which were mentioned. Each section of the ad. was surrounded by a separate line border, thus avoiding a hodge-podge effect.

Exploiting Sponges.—

John C. Godding, of Boston, president of the American Pharmaceutical Association, has two pharmacies in the fashionable Back Bay District of his city. A large credit business is done with well-to-do customers, and the consid-

J. G. GODDING & CO. Pharmacists

Dartmouth Street BOSTON Massachusetts Ave. Cor. Beacon St.

AUTOMOBILE DELIVERY

SPONGES

We have received our annual importation of "Extra Choice Mediterranean Bath Sponges," each sponge being as near perfect as is obtainable in shape, texture and quality. These can only be obtained in limited quantity. This display merits your attention if in need of High Grade Sponges.

OUR REPUTATION INSURES QUALITY

Thanking you for past favors and hoping for a continuance of your esteemed patronage, we remain,

Respectfully,
J. G. GODDING & CO.

erable number of statements sent out every month affords an opportunity for the enclosure of envelope slips featuring some one article or line of articles. One of the recent enclosures, devoted to the subject of sponges, we are reproducing in this connection.

CAPSULES OF SCIENCE.

Prepared by Prof. W. L. SCOVILLE.

Some Summaries.—

Most of the lecithin in the market is made from egg-yolk, but a French chemist claims that there is no lecithin in eggs.

By treating quinine with diglycollic acid chloride, a compound is formed which is said to be tasteless but very active when taken into the system.

Talc takes out coloring-matters, starch, gums, albumins, and other colloidal materials from solution, to some extent, but does not absorb crystalloids.

Copper-clad steel is being introduced for telephone wires, structural work, and in places where steel corrosion is to be avoided.

Let some isoprene stand in the dark $2\frac{1}{2}$ years and you will get some real rubber—enough to test. It polymerizes.

One-tenth of one per cent of calcium dioxide will preserve milk for three months or more.

Boiled meats do not digest as rapidly as raw meats, but meats roasted at 140° C. digest as rapidly as the raw.

It is stated that there are over 300 forms of pocket ignition devices, as well as gas igniters, now in use.

L. Debourdeaux says that about 10 per cent of the morphine present in opium is insoluble in water, and requires calcium hydroxide to make it soluble.

M. Nierenstein says that the alkaloid in guarana is not caffeine, but a principle very closely related to it. He calls it beta-guaranine.

Violet rays are said to kill plant cells, but not the enzymes contained in them. The action of these rays resembles that of anesthetics.

French lavender oil has been found to contain small quantities of thymol and of nerol.

The sugar production in Cuba is increasing rapidly at the rate of about a quarter of a million tons per year. Next year's yield is estimated at two million tons.

French chemists claim that if medicinal leaves be treated when fresh with alcohol vapor, under slight pressure, the enzymes are destroyed and absolutely stable liquid preparations can be prepared from them.

Metallic radium has been isolated as a bright, white metal, melting at 700° C., and turning black rapidly when exposed to the air. It decomposes water, attacks quartz, and blackens paper.

Phenol-oxalate is being introduced as a superior disinfectant. It decomposes in water, and is claimed to act more effectively than pure phenol.

A mixture of 40-per-cent camphor and 60-per-cent phenol solidifies at -30° C. (-22° F.). In other proportions the freezing point is higher.

The reason that boiling water destroys enzymes while a dry heat of 100° C. does not, is that the enzyme hydrolyzes in the hot water—so government chemists say.

Otto and Kooper say that strychnine and nicotine are not changed in soils, but that they alter the development of plants grown in the soil to which these alkaloids have been added.

Not Solanin, but Toxin.—

Poisoning by sprouting potatoes has been considered to be due to the abnormal amount of solanin which they contain. It is now claimed that the potato cannot develop enough solanin to be poisonous, but that warm potatoes which are infected by putrefactive bacteria may develop enough toxins to be poisonous.

A Successful Failure.—

Artificial camphor is a success in so far as its physical and chemical properties are concerned, but commercially it is not a success. A French firm, capitalized at about one and a half million, is not finding it profitable, and its manufacture may be abandoned.

Burn Gas.—

W. B. Smith says that gas is the ideal fuel for common household use. He claims that it does not dry the air as much as a coal fire, and that it is quite as healthful as a coal fire, and for intermittent use it is considerably cheaper.

Off Color.—

Alkalies intensify the color of caramel, and caramel has been found adulterated with sodium carbonate to the extent of 50 per cent. Such adulteration is easily detected by use of acids.

Something New in Cacao Butter.—

The odorous principle of cacao butter has been isolated. It is a ketone of nearly the same composition as oil of rue, and has a similar odor. It occurs in very small amounts in cacao butter.

A New Remedy.—

A little radium sulphate worked into glass is claimed to produce a glass which is permanently radioactive and suitable for medical or scientific use.

BOOKS.

ANOTHER BOOK ON PHARMACY.

"The Student in Pharmacy," by E. G. Eberle, comes to us from the press of the *Southern Pharmaceutical Journal*, Dallas, Texas. For the most part it goes briefly over the ground covered by the regular text-books on pharmacy, although without any effort to incorporate the material found in the Pharmacopœia and the National Formulary. There are chapters, for instance, on distillation, heat, comminution, percolation and the like. There are also chapters on the different classes of preparations in the U. S. P., such as syrups, glycerites, wines, tinctures, fluidextracts, etc. In the rear of the book are a number of pages devoted to questions and answers, percentage solution tables, incompatibilities, dosages, and other subjects of practical interest. In this section of the book we are pleased to notice the reproduction of a number of articles originally contributed to the BULLETIN OF PHARMACY. The book is bound in cloth and the price is \$2.00.

QUERIES.

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

The Quantitative Assay of Phosphoric Acid.

P. E. D. writes: "I should like to have some of the readers of your valuable paper answer the following for me:

"The quantitative test for acidum phosphoricum, U. S. P., says: 'If 10 gm. of phosphoric acid be diluted to measure 100 Cc., then 9.73 Cc. of this solution, when diluted with 10 Cc. of cold saturated solution of sodium chloride, should require 17 Cc. of normal potassium hydroxide V. S. for neutralization (each Cc. corresponding to 5 per cent of absolute phosphoric acid), phenolphthalein T. S. being used as indicator.'

"Why should 9.73 Cc. of the diluted solution be used, and not 10 Cc., and why 10 Cc. of cold saturated solution of NaCl, and not 9.73 Cc.? Why is NaCl used at all, and why a cold saturated solution? Why should this require 17 Cc. of normal KOH V. S. for neutralization (each Cc. corresponding to 5 per cent of absolute $H_3(PO_4)$)? How is it that each Cc. of the normal potassium hydroxide V. S. corresponds to 5 per cent of absolute phosphoric acid? Isn't it just as well to use any solution of potassium hydroxide of known strength, freshly prepared?"

In the titration of this acid by U. S. P. method it is supposed that you are testing an acid of U. S. P. strength (85 per cent), and if so, you would take exactly 17 Cc. of normal KOH for the following reasons: In the U. S. P. methods of assay all acids are first weighed so that a proportionate part can be taken, and that part is so regulated that the amount of N/1 KOH can be anything you desire to have it. In this case each Cc. represents 5 per cent because 17 Cc. are taken and 85 divided by 17 equals 5 per cent in each Cc.

In order to figure back the correct weight to take in order that it should form K_2HPO_4 with phenolphthalein with 17 Cc. it is necessary to figure the amount of H_3PO_4 the N/1 KOH would react with, which is given in U. S. P. as .048645 gramme. Therefore 17 Cc. would react with 17 times .048645, or .826965 gramme. If one gramme of acid was taken to start, the acid would therefore be that amount divided by 1 or 82.69 per cent; as this acid is supposed to be 85 per cent and not 82.68 per cent, some number less than 1 gramme is taken, which is found by dividing .826965 by 85 or .9728 gramme. Now in U. S. P. 10 grammes of acid is diluted to 100 Cc. and 9.73 Cc. containing .973 gramme of acid is taken.

In regard to use of NaCl, the later edition of U. S. P. 8th revision reads, "to a cold saturated aqueous solution containing 5 gms. of NaCl." This NaCl has nothing to do with actual chemical reaction, but the indicator (phenolphthalein) when used with H_3PO_4 is very faint, and NaCl is used to make color more pronounced, and therefore the amount to be used is optional.

Depilatories.

H. & J.—Depilatories are preparations for removing hair. They are most often in the form of powder, which should be in impalpable condition. The main or active ingredient is usually sulphide or sulphhydrate of one of the alkalies or alkaline earths, although the older depilatories were made with caustic alkalies. In using these depilatories they should be made into thin paste with water, applied in a thin layer to the skin, allowed to remain a few minutes and then scraped off with a blunt instrument, when the hair will have softened sufficiently to be removed without pain.

LIQUID DEPILATORIES.

Here is a formula from *Monatschr. für Dermatologie*, and recommended by Dr. Butte:

- | | | |
|-----|------------------------|---------------|
| (1) | Alcohol | 12 grammes. |
| | Iodine | 0.75 gramme. |
| | Collodion | 35 grammes. |
| | Oil of turpentine..... | 1.50 grammes. |
| | Castor oil | 2 grammes. |

Apply the mixture to the part from which the hair is to be removed once or twice daily for three or four successive days, increasing from day to day the thickness of the layer.

- | | | |
|-----|------------------------------------|-----------|
| (2) | Sodium sulphide, crystallized..... | 3 parts. |
| | Powdered quicklime | 10 parts. |
| | Powdered starch | 10 parts. |
| (3) | Powdered quicklime | 1 part. |
| | Sodium carbonate | 2 parts. |
| | Lard | 8 parts. |

Apply and remove after two or three minutes.

- | | | |
|-----|--|----------|
| (4) | Barium sulphide,
Powdered quicklime,
Powdered starch, equal parts. | |
| (5) | Powdered quicklime | 8 parts. |
| | Potassium carbonate | 1 part. |
| | Potassium sulphide | 1 part. |

This is known as "Chinese Depilatory," and, when finely powdered, should be kept in a well-closed bottle.

Too long contact of depilatories with the skin should be avoided, as they are liable to cause erosions and even ugly sores. To avoid any bad after-effect, the skin should be thoroughly cleansed and then anointed with a bland oil.

Silvering Iron.

I. R. wants a formula of a liquid for silvering iron.

There are upon the market various fluids, called "silvering fluid," "eau argentine," etc., which impart to clean and bright metal objects, simply immersed in them, a brilliant but very thin silver coating. The following is a formula for such a fluid:

Silver carbonate, 1 part; sodium hyposulphite, 10 parts; water, 10 parts. The silver carbonate is obtained by pouring a soda solution into a solution of silver nitrate, the resulting precipitate being washed and dried. Or it need not be dried, but simply put into a glass vessel with the crystals of sodium hyposulphite, where water is poured over it and the solution hastened by frequent stirring. The fluid is then poured off from the undissolved residue of the silver carbonate. The objects immersed in it are to be touched with a zinc rod.

TO SILVER CAST IRON.

To silver cast iron, 15 grains of silver nitrate are dissolved in 250 grains water, and 30 grains of potassium cyanide are added; when the solution is complete, the liquid is poured into 700 grains of water wherein 15 grains common salt have been previously dissolved. The cast iron intended to be silvered by this solution should, after having been well cleaned, be placed for a few minutes in a bath of nitric acid of 1.2 specific gravity just before being immersed in the silvering fluid.

Deodorizing Benzine.

F. S. J.—Benzine, as well as other petroleum distillates, may be purified by the official process in the U. S. P. The

Following is another process: Add to the benzine 1 or 2 per cent of oleic acid, which dissolves, and then $\frac{1}{4}$ per cent of aqueous solution of tannin, which incorporate by thorough agitation. A quantity of solution of caustic potash or milk of lime sufficient to combine with the acids is then well shaken with the mixture and the whole allowed to stand. The benzine rises to the top of the aqueous liquid, sufficiently deodorized for all practical purposes.

The following process has been patented in Germany for disguising the odor of benzine and other petroleum distillates: Add to the liquid a volatile oil containing a terpene such as oil of turpentine, fennel, caraway, lavender, pine needles, eucalyptus, etc., and then an alkali. If the benzine is mixed with one per cent of oil of fennel, warmed to 70° C., then agitated with 2½ per cent of solution of soda, specific gravity about 1.30, and allowed to stand till the benzine separates from the aqueous liquid, the former will have merely an odor of fennel.

Cachous: Breath Perfumes.

G. W.—We do not know the composition of the proprietary breath perfume which you mention, but the following formulas may be useful:

They consist of various aromatics combined with licorice extract, sometimes sugar, the whole being formed into a mass which may be divided into pellets, or it may be rolled out in a thin sheet and cut into little squares, or it may be rolled out into a very thin pill "pipe" about the size of a knitting needle, which may then be cut into short sections. After dividing the mass, the particles may be dried. If desired, the pellets may be silver-coated.

- (1) Oil of peppermint.....25 drops.
 Oil of lemon.....15 drops.
 Oil of neroli.....15 drops.
 Oil of cinnamon.....15 drops.
 Clove½ drachm.
 Cardamom1 drachm.
 Vanilla1½ drachms.
 Orris root2 drachms.
 Mace5 drachms.
 Sugar4 drachms.
 Licorice extract, powder.....1 ounce av.
 Mucilage of gum arabic.....sufficient.

Reduce the drugs to powder, add the remaining ingredients, make a mass and divide into pills weighing 1 grain each, or roll out flat and cut into small pieces.

- (2) Musk1 grain.
 Civet1 grain.
 Oil of vetiver.....1 drop.
 Oil of rose.....5 drops.
 Carmine5 grains.
 Tartaric acid10 grains.
 Gum arabic2 ounces av.
 Sugar8 ounces av.

Mix the ingredients intimately, forming a powder, add enough water to make a dough, and make into pellets.

Decolorizing Tincture of Iodine.

F. V. W. asks: "What crystal is used to decolorize tincture of iodine, or what solvent will accomplish that best without weakening the tincture too much?"

You might try crystals of sodium thiosulphate. There is a decolorized tincture of iodine which is made as follows: Digest at gentle heat a mixture of iodine, sodium thiosulphate, and water until a perfectly dark solution results; alcohol is then added, and afterward stronger ammonia water; when the liquid has become colorless and cool, sufficient alcohol is added to make up the required volume. The finished prepara-

tion is chiefly a hydroalcoholic solution of sodium and ammonium iodides, and the name decolorized tincture of iodine does not seem appropriate.

Filtering Gasoline for Motor Cars.

G. T. wants to know whether there is any method whereby chamois skin, leather, or similar substances can be prepared for filtering gasoline so that they will reject the water. The skin is to be stretched tight and a mixture of gasoline, dirt, and water is to be filtered, leaving no traces of any foreign matter in the filtered product.

We are informed by the automobile experts that ordinary chamois skin as procured on the market has the property of retaining water and dirt while the gasoline passes through. The chamois skin is suspended in a funnel. After the gasoline passes through, the water and dirt will be found collected in the bottom of the chamois and may be easily rejected. No special method of treating the skin is necessary.

Sweeping Compounds.

W. F. E. Co.—According to a patent issued in 1905, this is composed of sawdust, silicious material, rosin, oil, and tar. Another patent calls for catechu, 1 part; mineral oil, 8 parts; sawdust, 16 parts; bran, 32 parts; sand, 48 parts; and water containing a small amount of nitrobenzene, 32 parts.

This is offered as a good formula:

Paraffin wax	1 ounce av.
Paraffin oil	2 pints.
Salt	4 ounces av.
Sea sand	4 pounds.
Sawdust	5 pounds.
Oil of eucalyptus.....	1 fluidounce.

Melt the wax, add the paraffin oil, incorporate the sand, salt, and sawdust, and finally add the oil of eucalyptus.

Cleaning Wall-paper.

O. B.—Here are three methods of cleaning wall-paper:

(1) To remove all stains or marks, where people have rested their heads, from wall-papers, mix pipeclay with water to the consistency of



FOUR KNIGHTS OF THE GRIP.—These representatives of Parke, Davis & Co. were photographed not long since while standing in front of the Congress Hotel in Pueblo, Colorado. Reading from right to left are H. A. Allshouse, Dr. R. L. Black, W. H. Raleigh, and Frank J. Heusel. Mr. Allshouse is manager of the Department of Traveling Service in the Kansas City branch.

cream, lay it on the spot, and allow it to remain until the following day, when it may be easily removed with a penknife or brush.

(2) If not very dirty, the paper of any room will be much improved by brushing it over in straight lines with a soft broom covered with a clean, soft cloth; if, however, the paper be much soiled, very stale bread is the best thing to clean it with.

(3) The following has been recommended: Mix together 1 pound each of rye flour and white flour into a dough, which is partially cooked and the crust removed. To this 1 ounce common salt and $\frac{1}{2}$ ounce of powdered naphthalene are added, and finally 1 ounce of corn-meal and $\frac{1}{4}$ ounce of burnt umber. The composition is formed into a mass of the proper size to be grasped in the hand, and in use should be drawn in one direction over the surface to be cleaned.

Hair Dyes.

O. D. R.—We do not know the composition of the proprietary hair stain which you mention, but the following formulas are suggested by the *Pharmazeutische Zentrallhalle*:

Nutgalls	50 grammes.
Water	300 grammes.
Ferrous sulphate	10 grammes.

Boil the nutgalls in the water, strain, in the colate dissolve the iron salt, and evaporate the liquid to two-thirds its original volume. This stains the hair brown.

The following is said to yield a dye which stains the hair brown immediately upon application:

Gallic acid	10 grammes.
Ferric chloride	8 grammes.
Water	100 grammes.
Acetic acid	8 grammes.

Dissolve the acid and the ferric chloride in the water. Add the acetic acid shortly before applying. The hair must be thoroughly washed in order to deprive it of fat and dried before applying the dye.

White hair is said to be dyed brown by the following:

Red wine	120 grammes.
Ferrous sulphate	3 grammes.

Boil for one minute. Apply to the hair twice a week, and let it dry after every application until the desired result is obtained.

Gold Luster for China Painting.

H. M.—Dissolve 1 drachm gold in $\frac{3}{4}$ ounce aqua regia, or simply dissolve this weight of chloride of gold in water. Add 6 grains metallic tin, and enough aqua regia, if required, to dissolve it. Pour this with constant stirring into a mixture of $\frac{1}{2}$ drachm balsam of sulphur and 20 grains of oil of turpentine. As it stiffens add $\frac{1}{2}$ drachm oil of turpentine and mix. More gold gives a brighter effect; tin inclines it to a violet tinge. Balsam of sulphur is made by boiling together in a covered vessel 1 part flowers of sulphur and 4 parts oil until the mass thickens.

Teething Powders.

A. C. M.—Here are two formulas for teething powder:

- (1) Make powders each containing:
Pepsin, saccharated 5 grains.
Magnesium carbonate 1 grain.
Charcoal $\frac{1}{2}$ grain.
Lactucarium 1-6 grain.
- (2) Make powders each containing:
Mercury with chalk $\frac{1}{2}$ grain.
Magnesium carbonate, heavy 2 grains.
Rhubarb powder 2 grains.
Sugar, powder 2 grains.

One powder is to be given to a child six months old; half a powder to a younger child.

The Calculation of Profits.

J. A. K.—The percentage of profit should always be based on the selling price instead of on the cost price. The main reason for this is that the percentage expense is always calculated from the total volume of business done—in other

words, it is based on the selling price, and the percentage of profit ought to be figured in exactly the same way for purposes of comparison. The difference between the percentage of expense and the percentage of gross profit is the net profit, and the two sets of figures are so vitally important that they ought always to be calculated in exactly the same manner.

An Elixir of Creosote Carbonate Impracticable.

A. C. M. is trying to accomplish the impossible. He wants to make an elixir of:

Creosote carbonate,
Terpin hydrate,
Heroin hydrochloride,
Sodium glycerophosphate,
Calcium glycerophosphate.

This is an excellent mixture therapeutically, but a bad one pharmaceutically. A clear solution of creosote carbonate is quite impossible unless one uses a very strong alcohol, which is undesirable. An emulsion can be made. Formulas for emulsion of creosote carbonate have appeared in the BULLETIN before and can be found by consulting the annual indexes in the December issues. There was one, for instance, on page 384 of the BULLETIN for September, 1910.

To Find the Number of Carats Gold.

O. B. wants to know the jeweler's test for determining the number of carats in gold!

To find the number of carats of gold in an object, first weigh the gold and mix with seven times its weight in silver. This alloy is beaten into thin leaves, and nitric acid is added; this dissolves the silver and copper. The remainder (gold) is then fused and weighed; by comparing the first and last weights the number of carats of pure gold is found. To check repeat several times.

A Troublesome Headache Powder.

L. J. M. is experimenting with a headache powder containing acetanilide, sodium bromide, citrated caffeine, and sodium bicarbonate. He complains that he can't prevent the absorption of moisture even though he has used wax paper.

We suggest the citric acid be omitted. Otherwise the powder will cake unless it be put up in bottles. Use plain caffeine instead of citrated caffeine, and there should be no further trouble.

Vanishing Cold Cream Mentholated.

R. W. T.—In the March BULLETIN appeared a comprehensive article on the manufacture of greaseless cold cream. If you wish a mentholated preparation, select the formula that suits you best, and toward the end of the operation add one half of one-per-cent menthol.

Short Answers.

L. J. M.—A formula for a disinfectant composed of chlorides appeared in the November BULLETIN, 1910, on page 483.

C. A. N.—Two formulas for a shampoo liquid were given on page 525 of the December BULLETIN, 1910.

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THE MONTH'S HISTORY

PREREQUISITE BILLS IN THREE STATES.

The graduation prerequisite has apparently had rather hard sledding this year. It has failed of adequate support in at least three State legislatures—Illinois, California, and Washington. It might possibly have succeeded in California but for the development of two factions among the pharmacists themselves, who seemed to be at loggerheads with one another over two or three different bills covering pharmacy and anti-narcotic matters. This situation resulted in the blocking of all legislation. In the State of Washington the Board of Pharmacy was in favor of the prerequisite requirement, but the State association was rather lukewarm, and there did not seem to be support enough to push the thing through. In Illinois, as in California, there has been

more or less misunderstanding and confusion of purpose, and criminations and recriminations have been quite frequent.

It seems that in the latter State the bill drafted by a committee of the State association was subsequently amended in several important particulars. Some people say this was done to coöperate with the State association; others say it wasn't—and there you are. Things seem to be rather mixed up in Illinois, and at the forthcoming meeting of the State association it is quite likely that the legislative situation will be discussed with a good deal of frankness and that a few hard names will be called. It is particularly difficult to find out just where the majority of sentiment lies with respect to the prerequisite idea. The State association has apparently voted in favor of it, but those who are opposed to it claim that the meeting was packed, while those on the pro side charge with equal vigor that the enemies of the graduation prerequisite are actuated by purely selfish interests. We shall see what we shall see.

The Illinois bill, as it finally passed, made but few changes in the pharmacy statute. The fee for filing an application for registration as a pharmacist was increased from five to ten dollars, and the salary of the Secretary of the Board was raised from \$2500 to \$3000. One provision makes the pharmacist the owner of the prescription by compelling him to keep all prescriptions on file for five years.

* * *

**BILL FATHERED
BY "THE WORLD."** The crusade inaugurated by the *New York World* against the druggists of that city is gradually dying out, although there are spasms of activity every few days. Once or twice a week another article appears under scare-heads, in which additional charges are made against the integrity of the calling. One of the latest developments is the introduction of a bill into the State legislature fathered by

Assemblyman Turley, and supported very strongly by the *World*.

This bill is certainly a curiosity. No prescription may be filled by a pharmacist unless it purports to have been issued by a duly licensed physician, and the physician's business address must appear thereon. When the mixture is put up, the actual dispenser must write his full name, license number, and house address on the label. The address of the physician is to be given in order that the druggist can look him up in the directory and be satisfied beyond all cavil of his existence and identity, and an elaborate record must be kept by the druggist comprising, among other things, the physician's name, his address, the name and address of the dispenser, and the ingredients prescribed.

This is such a bill as might be drawn by "reformers" who know nothing either of the practice of medicine or pharmacy. It is ridiculous on the face of it, and it means an amount of work and detail which are all but prohibitory.

* * *

SOME NEW LAWS.

Several legislative matters are worthy of brief comment this month. In Tennessee two reactionary laws have been passed creating pharmacists out of unqualified men. One of them gives to all assistant pharmacists who have spent an apprenticeship of five years full registration without taking a board examination, and the other gives the same privilege to physicians in towns under 2000 population. The pharmacists of Tennessee were evidently asleep. It will be another year or two before the situation can be remedied and then it will take some pretty hard work.

In Indiana, on the other hand, the pharmacists of the State got busy and secured the enactment of a law which prohibits, under suitable penalties, the sale of drugs and medicines within two miles of a drug store. This seems to us a very good answer for the question: "In what rural districts shall drugs be sold by unregistered dealers?" In Ohio an anti-sampling bill has been passed. This was fathered heartily by the organization of clerks known as the National Association of Pharmacologists, and the act prohibits the distribution of samples of patent medicines. Prior to the passage of this law the author of it, P. A.

Mandabach, secretary-treasurer of the N. A. P., had collected reports showing the deaths of 14 children in a period of five years from the eating of medicine samples left on door-steps and in yards.

A new poison bill has been introduced into the State legislature of New York which has apparently caused more or less worry. It is the familiar type of measure providing that all poisons must be dispensed in bottles of "peculiar shape or in bottles having a cork or stopper of such character as to apprise any person handling the same by sense of touch that the contents thereof contain poison or poisonous ingredients."

* * *

NEW POISON LAW IN MICHIGAN.

Unknown to the drug trade of the State, there was slipped through the Michigan legislature at the last minute a bill requiring that all poisons in Schedule A and Schedule B must hereafter be sold by retailers and wholesalers only in bottles having corks provided with "a wood, celluloid, glass, or metal disc, with serrated edge." The State Board of Health is to approve some particular cork and send a specimen of it to each affected dealer throughout the State. Violations of the act are punishable by a fine ranging between \$90 and \$300, or imprisonment between three months and a year, or both, at the discretion of the court—surely most severe penalties for a law of this character. The act goes into effect November 1. Who was responsible for the law no one seems to know, but, like the New York bill referred to in the previous article, it is a type of measure which makes its appearance every year in different States and for which druggists should always be on the lookout.

* * *

ADRENALIN PATENTS UPHOLD.

A decision of great importance has just been rendered upholding the validity of the patents on Adrenalin and Adrenalin Solution. The decision was rendered by Judge Hand of the United States Circuit Court for the Southern District of New York. Several years ago when Adrenalin was discovered by Dr. Jokichi Takamine, and the chemistry of the subject was given with great freedom by the Doctor to the scientific world, several manufacturing pharmacists took advantage of

the information and began the preparation of similar products, in some instances even adopting names sounding very much like Adrenalin.

Adrenalin and Adrenalin Solution, however, were protected by Dr. Takamine under process and product patents, and suit was brought first against the H. K. Mulford Co. for the manufacture of Adrin and Adrin Solution. It was this suit which has now been decided. The validity of the two product patents has been upheld, and Adrin and Adrin Solution have been declared to be infringements. An injunction will soon be issued prohibiting the Mulford people from continuing their practice of making these products.

Adrenalin and Adrenalin Solution are made by Parke, Davis & Co., who pay royalties to Dr. Takamine, the inventor. Other manufacturers who have brought out imitations of the Takamine substances are of course infringing the patents just as much as the Mulford Co., and suit will doubtless be brought against them in due time by Dr. Takamine.

* * *

DECISION IN THE A. D. S. CASE.

For the third time within a few months different judges of the United States Circuit Court have ruled that therapeutic claims do not come within the purview of the Federal food and drugs act, and that even though exaggerated in character they do not constitute "misbranding" under the law. The third and last decision rendered was that by Justice Vedder, in the United States Circuit Court for the Eastern District of New York, in a suit brought by the government against the American Druggists' Syndicate for the sale of "Peroxide Cream." Justice Vedder went so far as to declare that "by no possible construction can the terms of the act be extended to such a boundless field of inquiry as that involved in the accuracy of the remedial effects claimed for a drug." He intimated that the claims made for the product could in all probability not be substantiated, but his point was that the food and drugs act did not cover such a field of inquiry.

Incidentally one of the charges made by the government was that the A. D. S. "Peroxide Cream" contained so little actual hydrogen dioxide that the use of the term "peroxide" in the title of the product was false and mis-


leading. The Judge admitted that probably "in truth and in fact the article contained only an indication of a very small quantity of some peroxide, which said quantity is insignificant," but he asserted that no claim was made on the label as to the quantity or proportion present, and that furthermore the law did not require such a statement in the case of peroxide.

Since the foregoing was written we learn from the newspapers that the Supreme Court has just decided in the Johnson "Cancer-Cure" case that the food and drugs act cannot be held to apply to therapeutic or remedial claims. This will apparently prevent the food and drug authorities from bringing more cases against so-called "cures" and similar products on the ground that they are misbranded because not possessing the remedial virtues ascribed to them.

* * *

ADVERTISING THE STATE MEETINGS.

The secretary of a State pharmaceutical association is really the business manager of the enterprise. He ought to be possessed of the advertising instinct in order to

						
HANG THIS UP AND DON'T FORGET <small>that on the days marked you will</small> ATTEND THE MEETING <small>of the</small> Pennsylvania Pharmaceutical Association, AT BEDFORD SPRINGS, PA.						
1911	JUNE					1911
Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

build up the attendance—and then hold it after it has been gotten. We have been much struck to receive the small monthly calendar for June which we are reproducing in this

connection and which explains itself. It seems to us a very good idea. The original is of such size that it can be slipped conveniently into an ordinary 6½ commercial envelope and sent out with the preliminary announcements of the annual meeting.

* * *

INSTRUCTING THE DRUGGISTS.

Druggists as a class have not informed themselves any too well about the State and Federal food and drug laws. Many of them continue to be prosecuted, or at least to be warned, for more or less technical violations. Hence the wisdom and thoughtfulness of the authorities in Kentucky in arranging for a school of instruction to last ten days. This will be primarily for the benefit of the druggists of the State. It was originally intended to have the school held before this, but the date has been postponed until August. The lecturers will be made up of the food and drug officers and chemists in Kentucky, representatives from some of the manufacturing pharmaceutical houses, and several well-known pharmacists from here and there throughout the country. The State and Federal laws will be discussed with thoroughness; the important question of labeling will be gone into; the regulations will be explained; and important topics will be considered like the preparation, storage and deterioration of drug products. The whole idea strikes us as being admirable, and we hope it will be such a success that it will be duplicated in other States.

* * *

NO MORE SACCHARIN IN FOODS.

The Secretary of Agriculture has recently issued a decision forbidding the use of saccharin in foods after July 1. This decision is based on a finding of the Referee Board of Consulting Scientific Experts, and is the second finding of the Board since its creation. It will be recalled that the first one had reference to the use of sodium benzoate, and that it stirred up a controversy which is still very much alive. In that instance the Board found small quantities of sodium benzoate not to be harmful, but it declares after an investigation that this cannot be said of saccharin. Saccharin is therefore now taboo, and the decision affects more than 30 different classes of food. Some

of them most directly involved are soft drinks, sweet pickles, jellies, jams, and in some instances even beer.

* * *

CAN ANYBODY SELL H₂O₂?

The Ohio State Board of Pharmacy has decided that hydrogen peroxide is a pharmaceutical preparation and may consequently not be sold legally except by registered pharmacists. A warning will be sent out to grocers and others that if they continue handling this substance they will do so at their own peril. If we remember aright, similar action was taken in Kansas by the State Board of Pharmacy, but we recall also that a judge in New York State decided within the last year that hydrogen peroxide was not primarily a medicine and could therefore be sold practically by anybody, particularly in original packages.

* * *

A bill has been introduced in the present special session of Congress by Representative Sherley of Kentucky, the purpose of which is to impose a stamp tax on proprietary medicines like that suffered by the drug trade during the Spanish-American war. The bill apparently has little chance of passage at this session, but it is quite likely to come up for consideration at the regular session next December.

* * *

The Michigan State Pharmaceutical Association and the Michigan Pharmaceutical Travelers' Association will hold their annual meetings in Battle Creek on June 6, 7, and 8. The Post Tavern will be headquarters, and a special half-rate has been secured for all members' wives in attendance.

* * *

The Philadelphia branch of the A. Ph. A. has placed itself on record as favoring the omission of coca and other habit-forming drugs and their derivatives from the compound preparations of the U. S. P. and the N. F.

* * *

Mrs. Charles F. Weller, wife of the well-known president of the Richardson Drug Co. in Omaha, Nebraska, died very suddenly last month from a stroke of apoplexy.

EDITORIAL

PHARMACY TAKING THE BUMPS.

Since the abatement of the liquor-selling charges against druggists we had hoped that the sensationalist and muckraker would leave the drug business alone for some time to come. With the Department of Justice at Washington working overtime to stop the abuses of many of the big trusts, we had reason to feel that the newspapers might at least for awhile obtain ample matter from this source for their startling articles and glaring headlines.

But no. Comes forth the *New York World* with its editorials and articles flaying alive several hundred metropolitan pharmacists. The amount of damage done to the retail druggists of New York by the *World's* indictment, however, is largely problematical. It is notorious that men and women living in the great cities place little credence in the statements of the newspapers. In a desire for sensational material, the metropolitan dailies have so often been guilty of exaggeration that their readers now accept the most startling stories with calmness and equanimity. Distrust has taken the edge off the publisher's knife. As for faith in the papers, the readers haven't any!

But, after all, the thing that concerns us now is not the truth or falsity of the *World's* attack upon scores of New York druggists. To us the important consideration is simply this: Pharmacy is in the spot-light and the calcium rays of investigation are being turned now by government inspectors, again by reporters in quest of news, into every corner of the business, wholesale and retail. Nothing wrong can escape detection.

Even Roosevelt has a hand in the movement. Writing recently in the *Outlook* he says that the newspaper which advertises an injurious or worthless patent medicine is no better than one which sells space to promoters of fraudulent financial schemes. In either case, the victims are usually the uneducated poor who can least afford the loss.

If Roosevelt's stand is the ethical one, and no doubt it is, the anti-druggist articles in the *World* and other papers become something

of a travesty. While with one hand these journals wield the big stick upon the unshielded head of the retail pharmacist, with the other they reach an outstretched palm for the money of the medical charlatan and the quack. They blush before the misdemeanors of the retail druggist, but are not ashamed to accept the tainted cash of the manufacturer of a health belt or the distributor of a "free book for men."

Certainly the newspaper that gives publicity to an obviously worthless cure and thus develops a demand for it is culpable and morally liable. They say inconsistency is no vice. Nevertheless it tickles our risibles to see the newspapers assume the rôle of drug reformers while at the same time selling space to the manufacturer of an out-and-out fake.

In its issue of May 6, for instance, on page 5, the *World* devotes a half page to a drastic drug bill to "protect the public." But one has only to turn to page 10 of the same issue to find this loud exponent of drug reformation, this self-styled guardian and champion of the public health, give space to a "Free book for men." The advertiser who paid his good money to the *World* says, with the *World's* tacit approval: "When I resupply your nerves and blood with new vitality I take you out of the half-man class and make you strong, magnetic, full blooded, ambitious. I drive away all debility. All this I do without the use of drugs, medicines or other unnatural means. You simply use my health belt. You wear it comfortably around your waist nights; it sends a great stream of real vitality and vigor into your blood. You feel better at once; it takes the kink out of your back in one night. With special attachments it cures rheumatism, kidney, liver and stomach disorders."

Rather amusing, isn't it?

It is so easy to lay down rules for others. If the newspapers want to shout drug reformation, let them first make sure that their own advertisements do not violate the very ethics that their editorial pages so loudly proclaim.

THE STANDARD OIL DECISION.

The Supreme Court of the United States is making history these days. Its recent decision in the case of the Miles Co. against Park was of great importance to the drug

trade, but of far greater importance to the country at large was the decision in the proceedings brought by the national government against the Standard Oil Co. Everybody knows, of course, that the court ordered the Standard Oil Co. to dissolve itself into its numerous constituent organizations, and thus broke up the trust. What we desire to emphasize here, however, is the incidental position taken by the court that other suits brought against combinations may not necessarily be decided the same way; that each case will be decided on its own merits; that there are just and excusable as well as unjust and inexcusable restraints upon trade; that the Sherman act cannot be held to outlaw mere restraint upon trade itself regardless of its character and effect.

This attitude is of the greatest possible significance. Many publicists have feared for years that the Supreme Court would interpret the Sherman act narrowly; that the act would be held to prevent all sorts of trade restrictions, whether really hurtful to the public interest or not; and that an infinite amount of harm would be done to the business interests of the country. Everybody has consequently breathed a good deal easier since this decision was rendered.

We in the drug trade can surely be pardoned if we believe the Supreme Court, taking the attitude it now assumes, would have decided in favor of the drug interests in the suit brought several years ago by the national government—the suit which attacked the tripartite plan, and which resulted in the famous Indianapolis decree entered in one of the Federal circuit courts. If we remember correctly, the Circuit Court at that time held all combinations to be illegal under the Sherman act which could be shown to result in any restraint upon the freedom of trade and commerce, quite regardless of whether such combinations were in the long run for the benefit of the public or not.

The N. A. R. D. tripartite plan was a movement which emanated from the many who were weak, and which sought to prevent destruction from the few who were strong. The N. A. R. D. was simply attempting to do what the law-abiding labor unions have done so successfully. The labor union endeavors to raise wages for all. So admittedly did the N. A.

R. D. endeavor to increase earnings for all. The labor union seeks to prevent the comparatively few cut-rate "scabs" from working cheaply for selfish purposes and thus compelling the great majority of laborers to meet their prices and work for less than living wages. So did the N. A. R. D. seek to prevent the few cut-rate dealers from carrying out their purposes and compelling the whole class of druggists to sell their wares at less than living profits.

Both laborers and druggists simply attempted to prevent self-destruction. Both acted merely in self-defense. But unfortunately the N. A. R. D. and the labor union used the same weapons to achieve their necessary and just purposes that the oil and the sugar trusts have employed to achieve their unjust and censurable ends. All alike acted in concert; all "restrained trade;" and it was held at the time of the Indianapolis suit that concert of action and restraint of trade were forbidden by the Sherman law and that there was no way of legally separating the sheep from the goats.

Recognition has now come from the highest court in the land that there are trade agreements which are detrimental to society and others which are beneficial to it. Chief-Justice White strongly intimated in the decision that if the Sherman act could not be held to permit this discrimination there would be presumptive doubt of its constitutionality. We repeat that this means a great step ahead. We also repeat that under the circumstances it is more than likely that, could the Indianapolis suit have gone up to the Supreme Court, it would have been decided differently. But after all the mill can never be turned with the water that has passed.

WHITE SULPHUR IN MATCHES.

The Diamond Match Company recently did an act that speaks well for the charitable and generous character of its present management. It virtually gave up its patent rights to the use of phosphorus sesquisulphide as an ingredient in parlor matches. To make matches without this substance necessitated the use of the cheap white sulphur—a substance that conveyed a disease known as a phosphorus necrosis to the employees. The poor girls who

worked in match factories were frequently victims of this terrible affection.

President Taft interceded, with the result that the Diamond Match Company made a very generous concession, permitting its competitors to use the non-injurious form of phosphorus to which it had exclusive rights under the patent laws.

The cheaper white phosphorus that has caused so much misery among employees of the match factories is now practically a thing of the past. Its going out marks another milestone in the efforts now being made by industrial reformers to put a stop to occupational diseases. Let us hope that some day the other harmful chemicals used in manufacturing processes will be supplanted by safer products. Here is abundant room for research work. The lead poisoning of paint mixers, mercury absorption from manufacturing hats, thermometers or anything else containing quicksilver, arsenical poisoning from handling chemicals containing the metal, all tend to undermine health. It is encouraging to see Americans adopting some of the measures that have been followed in England and Germany to better the hygienic conditions of the laboring classes.

THE BULLETIN IN A NEW SUMMER SUIT.

Readers of the BULLETIN were doubtless surprised when they received this issue of the journal. The new cover appeared strange to them, and perhaps they had some little difficulty in recognizing an old friend. We say "an old friend," because we earnestly hope this is what the BULLETIN OF PHARMACY is to its readers.

How do you like the new cover anyway? We must confess that while the old one pleased us when it was adopted several years ago, we had gotten rather tired of it, and to us it suggested all too plainly the man whose once immaculate suit had gotten very glossy from wear, with sleeves and trouser bottoms somewhat frayed at the edge.

But the cover isn't the only new thing about the present issue of the BULLETIN. We have changed the shape of the page slightly—so slightly that it would probably escape detection with many people if we did not specifically call attention to it. The journal is now

a little narrower, a little longer, and has a somewhat more attractive shape. These changes are of course purely external, but we hope they reflect the more vital changes which are constantly being made in the journal itself—the new features, the wealth of illustrations, and the novel and interesting and profitable material with which we are always striving to fill our pages.

In an editorial published in the January issue we declared that we fully expected to make the BULLETIN during 1911 "a livelier, more readable, more helpful, more indispensable publication than ever." Nearly half the year has now gone, and it is not for us to say whether we have made good or not. We must stand or fall by our record. Anyway we have tried to turn out a better drug journal than ever.

A COLLECTION OF COLLEGE PROFESSORS.

In presenting the portraits of certain groups of men in the pharmaceutical world we have now reached the teachers. Perhaps we should have started out with them—but sometimes the best things are reserved for the last! At any rate, who shall gainsay the statement that these are all important men? They are the molders of character who take American youths from hither and yon and start them on the road to fame, fortune, and long hours.

Turn the next page and see our collection of professors in some of the American colleges of pharmacy. We haven't attempted to present them all—we couldn't possibly do it at one time. Some of them have already been pictured in these pages during the last few months, and others will be reserved for another time. Still others were so unnaturally shy and modest that they refused to give us their portraits even after the editor had assured them of the most tender treatment.

We recently asked a prominent board-of-pharmacy member for his portrait, and this is the reply we got: "Excuse me, Mr. Mason, but I have become so miserably ugly of late years (never was good looking) that I do not desire to put my face before the pharmaceutical public any more than I can help!" We wonder—is this a case of modesty?



Willis G. Tucker, Professor of Chemistry in, and Dean of, the Albany College of Pharmacy.



Charles W. Johnson, Dean of the School of Pharmacy of the University of Washington in Seattle.



Willis G. Gregory, Professor of Pharmacy in, and Dean of, the Buffalo College of Pharmacy.



Joseph P. Remington, Professor of Pharmacy in, and Dean of, the Philadelphia College of Pharmacy.



Harry V. Army, Professor of Pharmacy in, and Dean of, the Cleveland School of Pharmacy.



Frederick J. Wulling, Dean of the College of Pharmacy of the University of Minnesota in Minneapolis.



James H. Beal, Vice-dean of the Pittsburg College of Pharmacy.



Edward Kremers, Director of the Course in Pharmacy of the University of Wisconsin in Madison.



Julius A. Koch, Dean of the Pittsburg College of Pharmacy.

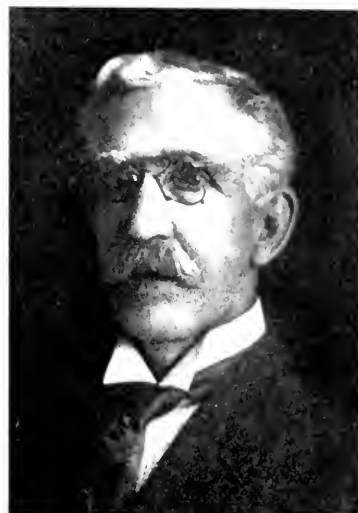
Well-known Teachers in the Pharmacy Schools and Colleges.



I. V. S. Stanislaus, Dean of the Department of Pharmacy of the Medico-Chirurgical College of Philadelphia.



Henry H. Rusby, Professor of Materia Medica in, and Dean of, the College of Pharmacy of the City of New York.



L. E. Sayre, Dean of the School of Pharmacy of the University of Kansas in Lawrence.



Julius O. Schlotterbeck, Dean of the School of Pharmacy of the University of Michigan at Ann Arbor.



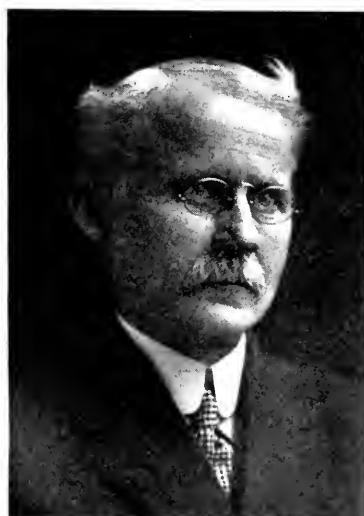
E. A. Ruddiman, Professor of Pharmacy and Materia Medica in the Department of Pharmacy of Vanderbilt University.



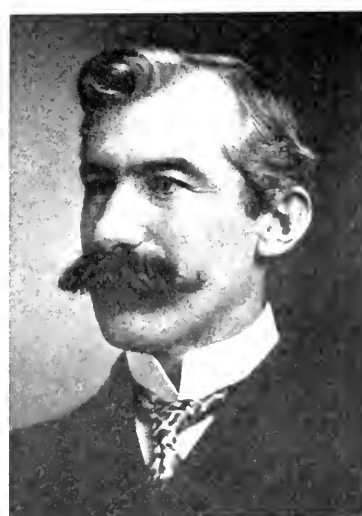
Clement B. Lowe, Professor of Materia Medica and Physiology in the Philadelphia College of Pharmacy.



George C. Diekman, Professor of Pharmacy in the College of Pharmacy of the City of New York.



A. B. Stevens, Professor of Pharmacy in the School of Pharmacy of the University of Michigan in Ann Arbor.



J. W. Sturmer, Professor of Pharmacy in the School of Pharmacy of Purdue University, Lafayette, Ind.



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

4. William E. Cliffe, Philadelphia, Pa.



Members of the Alabama State Board of Pharmacy.

Reading from the left, these men are S. A. Williams of Troy, L. C. Lewis of Tuskegee, W. E. Bingham of Tuscaloosa, W. P. Thomason of Guntersville, and E. P. Galt of Selma.



W. S. Richardson, Washington, D. C.

The chairman of the Committee on National Legislation of the N. A. R. D., as he appears to our cartoonist.



This is an interior of the big store of the Central Drug Co. on State Street in Chicago. The place was equipped by the Wilmarth Show Case Company, of Grand Rapids, Mich.



Here we have an outside view of the store of J. V. Van Gilder at 5602 Broadway in New York City. We assume that Mr. Van Gilder himself is the gentleman outside.



J. H. Beise has a store in Fergus Falls, Minnesota, in which it is apparent that a large and varied stock is carried. The cigar case alone is remarkably long and well filled.



This establishment is owned and conducted by the Pecos Valley Drug Co., of Roswell, N. M. Note the surprising width of the store and the space given up to soda tables in the center.



W. A. Abbett has three stores in Duluth, Minn., and certainly this new headquarters pharmacy is a beauty! A formal opening was conducted not long since and was liberally mentioned in the local papers.



This engraving shows an interesting exterior view of the Abbett pharmacy, of which the interior is shown across the column. A razor demonstration is going on inside the window, which shows how aggressively Mr. Abbett goes after business.

"How I Spent My Vacation."

Some time ago we offered prizes for vacation stories. Several druggists responded, the following narratives being two of those accepted. While they are a little foreign to the scope of the BULLETIN, pharmacists will read them with interest. All druggists take vacations occasionally, if not every year, and a description of what some of them have done on their annual outings will, we hope, inspire others to follow their example. The first story tells us of a sea voyage from Boston to St. John. The aviation meet of the Harvard Aero Club is a feature of the journey. Then follows a delightful trip along the Atlantic Coast. There are some pictures of the St. John River in Newfoundland, showing its wonderful tide. We read, too, of the Bay of Fundy and Moncton, a quaint Canadian town that rises and falls with the tide. The second story relates a trip to Alaska. Two druggists journey from South Dakota to the Yukon. First they ride by train to Seattle and then sail north on the Pacific. Mountains rise everywhere. The travelers find health and diversion, and finally staked a mine in the land of gold.—THE EDITORS.

A SEA VOYAGE FROM BOSTON TO ST. JOHN.

By B. L. BENNETT, BRISTOL, CONN.

The first part of my trip consisted of an uneventful railroad ride to Boston. Then things commenced to happen and continued with great rapidity for the week I was away.

MEETING OF THE HARVARD AERO CLUB.

I reached Boston at the time the Harvard Aero Club were having their aviation flights in Atlantic, a suburb of Boston. There I saw Brookins, Johnstone, Curtiss and Grahame-White all in the air at the same time. These aviators were breaking world records every day. I had previously seen some flying down at the aviation field at Mineola, Long Island, also seen Hamilton fly at New Britain, Conn., but the flying done in Atlantic at this time had never been equaled, until the recent flights made at Belmont Park.

I can only say to those who have never seen an airship in the air, that they have missed a sight worth going miles to see. There is a suppressed feeling hard to describe, realizing, as one must, that he is witnessing something that has been the aim of man for thousands of years. It brings a thrill and excitement that is not soon forgotten.

THE SEA VOYAGE.

The journey to St. John really commenced the next morning at ten o'clock when the boat left Boston. We reached St. John at seven

o'clock the next morning, having been on the water over twenty hours. During a good share of this time we were out of sight of land.

I took the Eastern Steamship Co.'s boat *Calvin Austin* on a direct passage to St. John. This company maintains a fleet of large, comfortable boats. The service is good and rates reasonable. My fare for the round



The summer residence of President Taft, Beverly, Mass., passed on the trip.

trip was \$6.00; the stateroom and meals extra. The rate was somewhat reduced at this time, the middle of September.

Passing out through Boston harbor, I saw crafts of all nations. I passed forts and fortifications, went out past Nahant, Revere, Lynn, Salem, Beverly (Taft's summer home), Gloucester, Marblehead and Cape Ann with its two immense lighthouses; then we sailed out of sight of land until the next morning.

At this time of year I found the weather

delightfully cool and pleasant, the air bracing and exhilarating:

ST. JOHN AND THE FALLS.

St. John, a city of fifty thousand people, situated at the mouth of the St. John River,



In St. John, N. B.—Suspension bridge over "Reversible Falls."

is the most important and interesting city in this section of Canada. The most interesting thing to be seen is the famous "Reversible Falls." There is only one other falls like it in the world, situated somewhere in Japan.

The Reversible Falls differ from what we call falls in this country. Instead of a sheer fall of water for a number of feet, they consist of a roaring cataract of water, like Niagara, falling a distance of several hundred feet.

These falls are situated on the St. John River near its entrance into the Bay of Fundy. Here the tides rise and fall a distance of thirty feet, which accounts for the falls. When the



Suspension bridge over Reversible Falls at high tide. The water is falling over the falls in a reverse direction. It is possible for boats to pass over the falls at this time, but at no other.

tide runs out, it causes a drop of thirty feet in water level. As a result there is a big fall of water and the St. John River rushes out over these falls in a raging torrent. As the tide turns and comes in, the water backs up the St. John River, overcomes the falls and flows

up stream, so that, part of the time, the water falls in one direction, and during the other interval falls in the opposite direction. The photograph of the suspension bridge shows the water at near high tide, rushing back over the falls in the reverse direction. At this time boats can pass up the river over the falls, but at no other time. Another photograph shows an island in the St. John River near the commencement of the falls, at low tide. A glance will show the reader how the tides rise and fall on the rocks.

The tides in the Bay of Fundy are noted for their great variation. At a place called Munckton the tide rises sixty feet. It is said here that wild hogs out nosing on the beach seem to scent the turn of the tides. When that time comes, they will turn tail and run for the shore grunting and squealing as though



St. John, N.B.—The Market slip at low tide. Boats are high and dry on the sand.

Satan were after them, and in spite of their speed are often overtaken by the tide.

THE DRUG STORES.

Another photograph shows the boats in the market slip. The tide is out and the boats are high and dry on the sand. Unloading is done by driving on the sand. A few hours later tide is in, boats are high in the water; unloading is continued from the docks.

Naturally I was interested in the conditions of the drug trade and compared the conditions there and other parts of the Provinces with conditions in the States. I came home convinced that the United States was good enough for me to do business in, even with all the little restrictions we have to put up with. The Canadians seem to me to be very moderate in all they do—do not seem to have the hustle and bustle seen elsewhere.

Saloons close at five o'clock Saturday afternoons, which is a plan that might be employed to advantage in this country.

The drug stores seemed to confine their efforts to straight drug business. Evidently they have not been driven to side-lines of candy, cigars, post-cards, razors, and what not like their brethren in the States. One side-line I did notice in a prominent drug store in St. John, which interested and amused me, my attention being attracted by a sign in the window, "Marriage Licenses Issued Here." At first thought, that business would not seem to be very remunerative, but I suppose it all depends on the number desiring to wed.

But to be serious, I enjoyed the sights and the bracing air. The sea voyage was all that could be desired, and I hope in the future to take a more extended trip through the Provinces.

A TRIP TO ALASKA.

By CARL L. STANLEY, MARYSVILLE, WASH.

We started from Fulton, South Dakota, for a trip along the Pacific coast. For three days and nights we traveled on one train, finally arriving in Seattle, Washington.

After a few days' rest in this big, hustling western city we left on the *Princess Victoria*, one of the finest vessels on the Pacific coast, arriving in Victoria, B. C., May 18. It was certainly the "City Beautiful." Facing the water front was the one and a half million



Cabin at the "Little Minnie" mine, Alaska. From here the Stanleys prospected, fished, and hunted.

dollar government building made entirely of white stone. This beautiful structure was draped in purple and black for King Edward, as were all other public buildings. The maple trees surrounding these buildings were the largest and most perfect found anywhere. They must be seen to be appreciated. The population is twenty thousand, with five hundred Chinese. The Chinese pay the government five hundred dollars to get in.

SOME INTERESTING PLACES.

Dunberry Castle was a sight in itself. English laurel hedge was seen everywhere. We passed the beautiful residence of the Lieutenant-Governor. It is kept up by convict labor. Next we went out to Beacon Hill in a tally-ho. Here we found the relics of the beacon light used to light up the harbor in the days of Hudson. Beacon Hill park was a fine treat.



The Stanley party enjoying their Alaskan outing.

We found a Bobby Burns monument in the watering place and the English guide described it as "Bobby Burns on the water-wagon." In the United States he is found on Scotch whisky.

In the park we saw a large bell brought from China. Each part has a different tone. It is thousands of years old. The characters cannot be described by the Chinese of the present day. We enjoyed Swan Lake with its large white birds.

From here we went to Vancouver, a pretty place, but a bit slow. Japanese are numerous there. The weather was ideal and the trip between the coast ranges could not be improved. Snow-capped mountains were to be seen with rivulets of water flowing down their sides. Little islands along the coast—miles and miles of timber, and hunting and fishing huts and sawmills, were common sights. As we neared Queen Charlotte Sound the sea was very rough. Passengers everywhere were sick. Strange as it seems, with my knowledge of drugs I could not recommend one thing for myself to overcome the strange feeling in my stomach; so I joined the rest of the crew who were feeding the fish. We saw swordfish, hair-seals, whales, and many water-fowl.

On passing the islands, the mountains begin to loom up. They were wonderfully steep

with glacial tops. Along the sides are places where snowslides have taken place.

Our next stop was at Prince Rupert, one of the new northern towns just three years old. It has a great future. We left Prince Rupert



The writer's wife.

and proceeded up the Portland Canal, with American soil on one side and British on the other. We looked for the Stars and Stripes to be floating from Uncle Sam's mountains. Naught but the red and white of "Merry Old England" could be seen.

We reached Stewart, B. C., May 25. This town is also on the water front, being on an inlet of the Portland Canal. High mountains covered with snow greeted our eyes wherever we looked. Miners were climbing the mountains in a mad rush for gold. We left here on foot and rushed over the mountains and through forests, crossing snow fifty feet in depth. We were bound for Salmon River, where my brother had charge of a big mine. We reached there worn out and were installed in a little log-cabin belonging to the mine operators.

AN ENJOYABLE OUTING.

From here we prospected, fished and hunted. We enjoyed our first mountain goat, but it was expensive eating. When it came to our meal of bear meat we used mustard, pepper and other things too numerous to mention to kill the odor and taste, but it come out bear every time. We got water from a stream flowing from a glacier, and I wish, brothers, you could taste it. We lived there for three months, our provisions coming up on pack horses to the miners. In this way they brought us also our letters and papers.

The trip cost us just five hundred dollars. But we had rest, health, and the best time in the world.

I located some mining claims, and even though I am now rolling pills here in Washington, where I settled when I came down from the North, I have great dreams of the wealth that will come from my trip to Alaska.

THE ASSAY OF ACONITE.

By DR. A. B. STEVENS,

Professor of Pharmacy at the University of Michigan.

The pharmacopœial method has been severely criticized. The evaporation at 60° consumes much time, and when the residue is dissolved in water filtration frequently requires several hours. Both of these objections would have been avoided had the writer's method been strictly followed. The evaporation should be accomplished in a broad, flat-bottom evaporating dish, or an ordinary dinner plate will serve the purpose. Five grammes of powdered pumice stone should be added to the percolate before evaporation. This makes the

residue more porous, aids solution, and the filtration requires only a few minutes.

It has been frequently stated that the chemical assay of aconite is unreliable. The writer believes that he has previously proven this to be untrue, except in preparations of the drug that have been prepared by heat.* Statements are also made to the effect that the method is unreliable for the old or deteriorated drug, or its preparations. These statements do not

*Pharm. Arch., vol. 6, p. 49.

seem to be based so much upon experimental evidence as on the fact that, chemically, aconitine is known to split into bases naturally expected to neutralize acids; hence, to give erroneous results by titration. These conclusions are also based on the fact that gravimetric determinations are sometimes lower than the volumetric determinations. This is claimed to be due to the splitting up of the aconitine into another base of lower molecular weight. It occurred to the writer that while it is true that aconite may be split up into other bases, by chemical means, it might be possible that in the decomposition of aconitine by natural causes, as age, moisture, etc., the same agencies which decompose the aconite might also further decompose the first-formed product. In this case there might not be a very large proportion of undecomposed bases present with the aconitine, or, if present, they might be in a form insoluble in ether, and hence not materially affect the assay.

With this thought in mind, the following experiments were made. A sample of aconite which chemically assayed 0.837, and physiologically assayed 1:1200, was moistened with water, and placed in a wide-mouthed bottle. A piece of cotton moistened with chloroform was placed on the drug, the bottle carefully stoppered and allowed to stand several days. The aconite was then dried and assayed. The result, chemically, was 0.67 and 0.66; the result physiologically was 1:700.

Another sample was made quite wet, loosely covered, and allowed to stand in a warm place until covered with a dense mold that bound it together so that it could be cut with a knife. It was then dried, powdered and assayed. Results chemically, 0.301 and 0.321; physiologically, 1:450.

Several samples known to be old were next assayed. A museum sample of whole tubers in good condition, known to be at least twenty years old, assayed chemically 0.645 and 0.650; physiologically, 1:850.

A sample so badly worm-eaten that the tubers would not hold together, assayed chemically, 0.445 and 0.430; physiologically, 1:400.

Three samples of old powder, of age not definitely known, assayed:

No. 1, chemically, 0.490 and 0.485; physiologically, 1:500.

No. 2, chemically, 0.200 and 0.198; physiologically, 1:300.

No. 3, chemically, 0.542; physiologically, 1:500.

Four old fluidextracts were assayed with the following results:

No. 1, chemically, 0.316 and 0.310; physiologically, 1:400.

No. 2, chemically, 0.298 and 0.384; physiologically, 1:300.

No. 3, chemically, 0.142 and 0.139; physiologically, 1:75.

No. 4, chemically, 0.274; physiologically, 1:300.

These experiments certainly prove that the deterioration of aconite by age or moisture may be detected by chemical as well as by physiological assay.

The action of heat upon preparations of aconite cannot be better shown than by quoting from the very excellent paper on "Aconite" by F. O. Taylor (*Journ. Ind. and Eng. Chem.*, vol. 1, pp. 549-567):

"It now remains to compare the results obtained by chemical assay and by the Squibb test. A series of assays by four chemical methods are given on page 556; from these it was decided to adopt the U. S. P. method, which is practically Stevens's method, as yielding the highest percentage of aconitine. A fluidextract was selected, and this was assayed gravimetrically; the alkaloid was also titrated with N/10 sulphuric acid, and the fluid also tested by Squibb's method. A portion of the same fluid was then heated for two hours at 100° C. and assayed gravimetrically, by acid titration and by the Squibb test."

ASSAYED BY METHOD IV, WITH AND WITHOUT PREVIOUS HEATING. (F. O. TAYLOR.)

Without previous heating.			Previously heated for 2 hours at 100°.		
	Weight.	Titration.		Weight.	Titration.
1	0.551	0.438	1	0.591	0.323
2	0.455	0.438	2	0.597	0.387
3	0.714	0.426	3	0.529	0.277
4	0.468	0.413	4	0.558	0.277
5	0.479	0.490	5	0.506	0.252
6	0.439	0.477	6	0.576	0.252
7	0.469	0.477	7	0.517	0.294
8	0.468	0.490	8	0.530	.....
9	0.505	0.456	9	0.611	.....
Responded to Squibb test in dilution of 1:700.			10	0.664	.....
			11	0.575	.....
			By Squibb test gave no reaction in dilution of 1:80.		

These results disprove the assertion that the decomposition products are bases of lower molecular weight, hence give higher results by titration than by weight. The only cases in which the results by titration were higher than

those by weight were Nos. 5, 6, 7, and 8; all these were with unheated fluidextracts responding to Squibb's test in dilutions of 1:700. In every determination of the heated fluidextract the results by titration were much below those obtained by weight.

The results obtained by Mr. Taylor by titration alone are sufficient to condemn all the samples subjected to heat. If this be true, then his results prove that while the method may not be scientifically exact, *it serves the purpose for which it was intended, namely, to insure an aconite, or a preparation of aconite, of good quality for medicinal purposes.*

Determination of Ether-soluble Bases; also Chloroform-soluble Bases.—In each case the drug was extracted with a mixture of alcohol 7 volumes and water 3 volumes, evaporated, dissolved in acidulated water, the solution made alkaline, extracted with ether, again evaporated, weighed, and titrated as ether-soluble bases. After extracting with ether, the aqueous solution was extracted with chloroform, evaporated, weighed and titrated as chloroform-soluble bases. The solution from the chloroform residue, after titration, was in each case tested physiologically and found to be inactive.

	Ether-soluble bases.		Chloroform-soluble bases.	
	Weight.	Titration.	Weight.	Titration.
1	0.71	0.70	0.262	0.28
	0.72	0.715	0.245	0.28
2	0.62	0.664	0.25	0.228
	0.63	0.664	0.27	0.238
3	0.65	0.654	0.235	0.232
	0.65	0.657	0.282	0.235
4	0.382	0.38	0.09	0.128
	0.382	0.45	0.116	0.141
5	0.68	0.712	0.278	0.268
	0.612	0.64	0.256	0.257
6	0.775	0.779	0.265	0.271
7	0.68	0.712	0.28	0.271
	0.659	0.701	0.273	0.29
8	0.575	0.577	0.077	0.077
	0.58	0.59	0.096	0.077

No. 4 was an inferior worm-eaten specimen physiologically active in solution 1:300. The solution from titration of the ether-soluble residue of No. 8 was active in solution equivalent to 1:750.

The factors for aconitine were used in calculating the results by titration of the chloroform residue. This makes the results too high, as the molecular weights of aconine and

benzoylaconine are less than the molecular weight of aconitine. Doubtless there is always a small quantity of benzoylaconine, and possibly a little aconine, dissolved by the ether. This would account for the fact that, with good aconite, the results by weight are sometimes slightly higher than by titration. The character and quantity of the chloroform residue prove that a very considerable quantity of the inactive alkaloids are not dissolved by the ether, and also that chloroform should not be used in the assay of aconite.

Physiological Assay.—A tincture was prepared from aconite which assayed chemically 0.837, and when tested physiologically by the writer gave a distinct tingling sensation in a solution of 1:1200. The tincture was then tested upon 12 persons, each of whom was familiar with the taste of aconite. Six were sensitive to dilutions of 1:1200. Two were sensitive to dilutions of 1:900. One was sensitive to 1:800, and afterward thought he could detect it in 1:900. Another was sensitive to 1:600. Two others were unaffected by 1:150, but thought they were by 1:100. Some were found to be more sensitive at one time than at another.

This proves that the method cannot be relied upon for quantitative assay. When used by those who are known to be *sensitive*, it is a good method to determine whether the drug or its preparations are medicinally active or not.

CONCLUSIONS.

1. That aconite properly kept does not deteriorate.

2. That when deterioration takes place through improper care such deterioration may be detected by chemical assay.

3. That when deterioration is due to heat the weight of ether-soluble residue is increased, the basic properties decreased, hence the deterioration is easily detected by volumetric assay.

4. That the Squibb test is valuable for comparison, but is not suitable for pharmacopœial standardization to be used by different individuals.

5. That chloroform should not be used in the assay of aconite.

6. That the chemical assay is not scientifically exact, but is sufficiently accurate to be used in determining the quality of aconite or its preparations.

"MY BEST PAYING SIDE-LINE."

Brushes of All Kinds—Trimming the Window with Them to the Best Advantage—Conducting Special Sales—What a Good Display of Brushes Will Accomplish in Itself.

By CHARLES W. HOLZHAUER,
Newark, N. J.

Next to our soda fountain, which we hardly consider a side-line, the sale of bristle goods—hair, tooth, nail and other brushes—pays us best. To these articles we devote about ten feet of counter space in the most prominent



A hair-brush window showing the large brush as the central feature.

part of the store where all customers who enter must see them.

To stimulate the sale of these goods we conduct special sales at regular intervals, making a low price on them for the time of the sale, and giving good value for the money. When we are running a special sale, we devote extra display space in the store to the goods, use special signs calling attention to them, make an attractive window display, and often, in connection with all this, use newspaper space dwelling on the special opportunity offered for purchasing some of the articles. Such sales yield a net profit of 25 per cent.

THE WINDOW A VALUABLE ASSET.

We most decidedly use our window to push the goods, considering it the best advertising asset we have. In making window displays of tooth and hand brushes, because the articles themselves are comparatively small, we use specially made large brushes which are exact duplicates of the small ones, and these are

featured as the central part of each display. This idea we originally obtained from the book of "Window Displays for Druggists," published by E. G. Swift, Detroit, Michigan. The large brushes are easily made, and their cost will not exceed four or five dollars each, and they can be used for a long period. We made ours in the following way:

Have a wood-turning concern make a back for the brush of wood in exact proportions, about six feet long, or any suitable length according to the window in which it is to be used, the under side of which is drilled full of holes to receive the bristles. Stain this back any suitable color; for a tooth-brush, white enamel will be best; for a hair or hand brush, mahogany stain looks well. Now having the back ready, secure from a brush factory sufficient tampico fiber to fill up the holes. Separate this into little bunches and set each tuft



This display we ran in January. As all the department stores were conducting sales in white goods after the holidays, we called ours a "White Tooth Brush Sale."

into the holes with plaster of Paris or glue. The brush will then be ready for use.

Hang it in the center of the window, where every passer-by will see it—even people across the street—and will know that you are offering brushes for sale. It is an easy matter to fill in the rest of the window with piles of brushes

arranged in various forms or loosely stacked up. A large number of brushes to give the impression of quantity also helps the appearance of the display. Large signs on the glass of the window, and some smaller reading placards on the floor of the window, will about complete the arrangement.

SOME NOVEL FEATURES.

In conducting these sales we have endeavored to give exceedingly good value, and to introduce some novel or unusual feature in them. We have for several years successfully run tooth-brush sales along this idea, "Two Tooth-brushes for 25 cents," and it has proved a winner. We made no mention of the price of a single brush, and among the large num-



An enlarged comb displayed in the window during our comb sale.

ber that we disposed of, very few single brushes were sold. Nearly every one took two for 25 cents.

In buying for these sales we try to get as close to the manufacturer as possible, so that we can get the very best price, and may be able to offer the goods at a low price and still make a profit. Very often we are able to pick up job lots of good brushes at a price which gives a nice assortment for the sale. Quite recently we purchased a trunk line of hair-brushes, 250 brushes in all. We cleaned up those that were soiled, put our large brush in the window, made the prices attractive, and in a week's time sold over half our purchase. This was a particularly desirable lot because nearly every brush was different, which gave the customer a large assortment to choose from.

At another time we bought a quantity of domestic hair-brushes from the factory at \$21

a gross. These were exceptionally good value, and would retail in the regular way at 35 cents. We ran these as a special for 25 cents, and sold out all by a week's window display.

Sanitary Hair Brushes Special

25c

Worth up to \$1

Think of a pure bristle, solid back, sanitary Hair Brush for only 25c. They'll stand water, too. Many in the lot are regular \$1 brushes. They're being snapped up like hot cakes.

We carry a wide assortment of Hair Brushes at prices ranging up to \$5.

HOLZHAUER'S
Broad and Market Streets

Special! Hair Brushes

25c

Values up to \$1

These are pure bristle sanitary brushes, with solid backs. Water will not affect them. Many brushes in the lot have sold as high as \$1. Your choice at 25c.

OUR LINE OF HAIR BRUSHES

is unusual in assortment and pleasing in quality. A wide range of prices up to \$5.

HOLZHAUER'S
Broad and Market Streets

These ads. were run in the newspaper while the hair brushes were on display in the store window.

We conduct these sales regularly, about one bristle goods display at least every two months, and people have come to look for them. The summer months we find are best for scrubs, while the others are staple almost any time of the year.

BRUSH SALES.

As a result of these sales our trade in brushes has been wonderfully increased not only for the cheaper goods, but we have found that people will also purchase higher priced

HAIR BRUSH SPECIAL

25c

Values
up to \$1

The Last Week

This Special Sale of Hair Brushes at 25c. is making all Newark talk. There are many \$1 Brushes in the lot.

They're sanitary brushes. All pure bristle, with solid backs. Water won't hurt them.

There's a wide choice of other Hair Brushes here at prices ranging up to \$5.

HOLZHAUER'S
Broad and Market Streets

Another ad. run in the paper during the hair-brush sale.

brushes when their merit is explained. It is essential and helpful that the man who is selling bristle goods be posted himself about their quality and the different methods of manufacture, so that he can talk intelligently to his customer on these points. We feel confident

that if any one will devote a little time and thought to the sale of bristle goods in his store, he will be amply repaid, and will regain a part at least of the business which was once wholly handled by the drug trade, but which has of late drifted to the department store.

STROPHANTHUS.*

By JOHN URI LLOYD, PHAR.M.

The genus *Strophanthus*, which produces this drug, is chiefly African, belonging to the Apocynaceæ and the tribe Echitideæ of this order, distinguished from the other tribes of the order chiefly from having the anthers united after the manner of the Asclepiadaceæ. Index Kewensis mentions several species, Bentham and Hooker eighteen species, Pax twenty-five species, and the genus is being rapidly augmented as the flora of Africa becomes better known. Plants of the genus have usually woody stems, emitting a milky juice when wounded, and are generally twining vines. The seed of commerce is probably collected from various species indiscriminately, which have been classified and differentiated by Pax, Planchon, Hartwich, Holmes, Blondel, and others.

Strophanthus hispidus D. C. was one of four species described by De Candolle as early as 1802, and is the species to which the drug was first ascribed. Its habitat is Senegambia and Guinea and other parts of Western Africa. The stem is a twining, milky shrub, with opposite hirsute leaves. (Hence the name *hispidus*, Latin for bristly, hairy.) The seed, which bears a slender style terminating in a plumose pappus consisting of long hairs,† is the part used in medicine.

*Bulletin No. 18 (Pharmacy Series No. 4) will give a brief history of every vegetable drug of the Pharmacopeia of the United States, 1900 edition. This Bulletin, like other Lloyd Library publications, is not in general circulation, nor is it sold commercially, being designed solely for exchanging for the publications of Societies and Academies of Science. Extra copies will be printed for those who, before May 15, enclose one dollar to "The Lloyd Library," Cincinnati, Ohio.

†Hartwich calls special attention to the fact that the hairs of *strophanthus* seed are very sensitive to moisture, spreading horizontally in dry air, and becoming erect in moist atmosphere. He suggests that the pappus would thus make a hygrometer sufficiently sensitive for practical purposes.

As stated before, the genus *Strophanthus* was established by De Candolle as far back as the year 1802. It was not until the early sixties, however, that the drug came to the general notice of Europeans as being one of the arrow poisons used among the African native tribes, there being two kinds of arrow poisons derived from this source. A poison was prepared on the west coast of Africa (Senegambia, Guinea, and Gaboon), called *inee* or *onaye*, which is derived from *Strophanthus hispidus* D. C. This is on the authority of Hendlot, who observed the plant yielding this poison in Senegambia at the River Nunez. A specimen of this arrow poison was sent to Europe and investigated by Pelikan in 1865. (*Comptes Rendus*, 1865, vol. 60, p. 1209.)

On the east coast of Africa, the *kombe* or *gombe* poison was in use in the Maganjah tribe, located near Lake Nyassa on the banks of the river Shire, a tributary of the Zambesi River. Consul Kirk in Zanzibar, in 1861, established that this poison originated from a *strophanthus* species, and forwarded specimens to Professor Sharpey in England for the purpose of investigation. Subsequently, in 1865, Livingstone's famous reports brought the *kombe* poison to a more general notice among the Europeans.

This species of *strophanthus* was at first considered identical with *S. hispidus* D. C., but the plant was shown by Oliver in 1885 to be distinct from the latter, and this justified the establishing of a new species, *Strophanthus kombe*.

The physiological features of the drug as a powerful cardiac were recognized by the first investigators (Sharpey, 1862; Pelikan, 1865; Fraser, 1871). Livingstone reports the observation of Consul Kirk that the poison remarkably reduced the pulse, but the drug was not authoritatively recognized by the medical pro-

fession until about the year 1885. In this connection it is interesting to note that in Somaliland, Africa, in order to establish the virulence of the poison, the native scrapes the skin from his own arm until the blood flows, when he applies the poison to the lower end of the bloody pool and watches the coagulat-

ing effect, from below upward. To the firm of Burroughs, Wellcome & Co., London, is largely due the position that *Strophanthus* occupies in the medical lore of the present day, this being due chiefly to the efforts of Mr. Henry S. Wellcome, through his friend, Henry M. Stanley, the African explorer.

CATCHING TRADE AT SUMMER RESORTS.

Running a Drug Store on the Great Board-walk in Atlantic City—How to Treat the Summer Girl—Hotel Patronage Presents a Peculiar Condition—The Lines that Pay at a Watering Place.

By F. G. RENBE.

After completing my college education in the oldest and best college of pharmacy in the land I set out to hunt a position. I chose Atlantic City because I thought the ocean breezes and salt air would be just the climatic condition for a young college "grad" after passing through the strenuous ordeals commonly known as senior "exams" and graduation week festivities. I was determined to land the first position in the first store I came to, and I did. I started in to do my turns in a live apothecary shop on the "great wooden way."

Our store was of the summer type that is delicately built, facing the ocean, mounted on driven spiles sufficiently high to escape the rush of angry waters at high tide.

IN A FASHIONABLE DISTRICT.

We were located in the most fashionable part of Atlantic City, namely Chelsea. The people who made up the summer colony were mostly society people of old Philadelphia.

The proprietor was a married man, strikingly handsome, who had a very good standing among the summer colonists. He was right there when it came to evening parties, and his wife, a charming type of pulchritude, was a very prominent figure in Chelsea social life. Our class of trade required unusual care on account of the very sensitiveness of these society folk. I learned it from the proprietor once, and I was equal to the occasion ever afterward.

Even the maids, who do considerable shopping, require careful attention. Kindness and little favors go a great way in bringing them back. It was our general policy to push them

to the limit on prices. We had to do it or we wouldn't have been able to carry away any clothes when the October blasts began to blow.

Our season extended from April 15th to October 1st; but we could only count upon six weeks of real business, extending from July 4th to August 20th. During the real busy season we could use six clerks besides ourselves, but clerks trained in handling Atlantic City trade at that time were not to be had for love or money. We had to handle the trade as best we could and content ourselves with that. Our six weeks' business which we counted on depended largely upon the weather. Of course, if weather conditions were perfect, everybody was happy, but when the thunder clouds came and Jupiter Pluvius poured out his flow of H_2O , many were the mourners and the druggists were not exempt. All suffered alike.

Long before the season started it was amusing to hear some of the old fellows get together and tell how much behind they were compared to the same time last year. But in my two years there, all ended well.

WHERE THE MONEY LIES.

Stationery, candies, prescriptions, cigars and toilet goods are the profit-makers. To keep summer trade, one must be courteous. Courtesy pays big dividends. Summer visitors come with money to spend. To induce them to buy you must treat them right and the money part will take care of itself. We found that low prices on advertised goods like patents paid well.

The trade would not stand for exorbitant prices on well-known goods, but paid us a

handsome profit on stationery, brushes, candies, and prescriptions. Suggestion brought many extra sales. With a tooth-brush we sold a dentifrice, and so on until we realized a nice sale with every buyer.

Summer visitors do a great deal of writing, telling their friends back home what a good time they are having even though they may be spending it not so lively.

We kept a splendid line of papeteries and got excellent prices with little or no comment. Our prescription trade netted us handsome profits. We were rushed continually and used the double-check system, which moved considerable worry from our shoulders. The prescriptions called mostly for calomel, sodium bicarbonate, and pepsin preparations. Indigestion remedies were in demand.

One of our most profitable side-lines was confectionery. We handled candy exclusively in box form. We sold considerable of the half-pound and pound boxes retailing at 40 and 80 cents respectively. Our good candies brought good trade, and good trade spent money for other things which helped us to live to tell the story.

HOTEL TRADE A GRAFT GAME.

At the beginning of the season every bell-

hop of the large hotels scours the city apothecary shops looking for discounts paid for goods obtained there. We didn't enter this kind of a game simply because we felt it paid to cater squarely to visiting trade. They were dealt with more fairly when they came to the store personally and besides received a touch of our courteous treatment. Goods delivered at the hotels, on the other hand, were re-priced to pay for the bellhops' trouble. The drug store sending such overpriced goods, of course, was blamed for overcharging and thus trade was lost.

HOW WE HANDLED THE SUMMER GIRL.

We found after a little study that it paid us good dividends to treat the summer girl ever so nice. She purchased toilet goods, stationery, drug needs, and found our courteous treatment just to her liking. She brought her admirers into our store to buy bon bons and sundaes. This gave us an opportunity of again extending our good treatment, which came back to us in tobacco trade and other incidentals. There is only one way to a successful season and that is a most courteous treatment at all times. It pays big dividends.

A CLOSE CALL.

A Druggist Swallows a Deadly Photographic Mixture, Momentarily Mistaking It for Brandy and Soda—His Own Presence of Mind and Quick Work by the Doctor are all That Save Him—A True Story.

**By ERNEST C. CRIPPS,
Berkhamsted, England.**

The smoking-room was full to overflowing that night, for the Royal Hotel was the headquarters of the British Pharmaceutical Conference, which was holding its meetings at Oxbridge. Many well-known Knights of the Pestle sat around, and each had contributed his story of experience, usually of the "shop," for the general good, except one, and it was now his turn to talk.

"Well, friends," he commenced, "I have been much interested in your yarns, especially those about mistakes in dispensing. But these mostly concerned other people. I want to give you an experience which very intimately concerned myself." He paused to moisten his

throat, and giving a few vigorous puffs at his cigar, continued:

MIXED DRINKS.

"I don't suppose any of you have been as near death as I have, and although the thing happened quite twenty-five years ago, I cannot recall it even now without a shudder.

"The younger ones here who are so used to using the dry plate in photography can have no idea of the old 'wet plate' process; but it was whilst developing one of these that I made an almost fatal mistake.

"It was on a hot July night in the year 1885 that I went down into my dark room, which

was in the cellar, to develop a plate I had taken late in the afternoon. For the benefit of those who do not know how these plates were prepared and developed I may say that a piece of glass was first covered with collodion in which were dissolved the iodides of various metals. It was then passed through a nitrate of silver bath, the iodides forming sensitive silver salts, upon which the light acted as in the modern dry plate.

"The developer was an acid solution of iron sulphate, and the fixer a mixture of cyanide of potassium and water.

"I have told you 'twas a hot night, and I took down with me a glass of—well, whisky and soda. This I stood by the side of my dishes, in company with the measures containing the developing and fixing solutions.

"Lighting my lamp, lit by gas, I commenced my work. The plate had been underexposed and needed a somewhat prolonged development. It was while I was rocking vigorously that I mechanically put out my hand for my glass of drink and took a hearty pull at what I supposed was whisky and water.

"But the first mouthful convinced me that I had made a mistake, for I had taken the fixing solution which was in a measure similar to the beverage in the tumbler.

"It flashed through my mind as I spat out what I could of the poison that I had still taken sufficient to cause death, and that in all probability I should not be able to get upstairs for help before loss of consciousness came on.

QUICK WORK.

"At such times one's brain works with lightning-like rapidity, and mine did then. Fortunately—I recommend all you young fellows here to do likewise—I had learned by heart all the antidotes required for the different poisons, and I knew the only thing to help me in that direction was some fresh ferric hydrate.

"But how could I get it? I had by this time thrown open my dark-room lamp, and by its rays I looked wildly round the small chamber. Nothing I saw was of use! And then my eyes rested on the developing solution, and I knew if I had an alkali I might yet win through.

"By this time my breath was coming in quick, hard pants, and a feeling of giddiness

was beginning to overpower me. Just then I spied a bottle of liquid ammonia in a corner. In far less time than it takes to tell it, I had poured it into the dish and had taken as much as the contracted condition of my throat would allow.

"And then I tried to get out of the cellar for help, but before doing so it occurred to my fast clouding mind that I should very likely be speechless and perhaps insensible long before I got up the steps, and any one discovering me would not know what was the matter and thus valuable time would be wasted. Tearing a piece of paper from my pocketbook, I wrote these four words upon it—I couldn't for the life of me do more: 'Cyanide, mistake. Taken antidote;' and with this in my hand I made for the stairs.

"You must understand that although it has taken me perhaps five minutes to *tell* you all this, all my actions were crowded into a few seconds, and when I arrived at the foot of the stairs not more than half a minute had elapsed since I took the dose.

THE CYANIDE POISONING.

"But already a great change had come over me. I had almost lost the use of my limbs and staggered like a drunken man. It was becoming more difficult to get my breath and occasionally convulsions shook me. But through it all my will remained dominant and I forced my tottering legs up the steps.

"It seemed centuries before I reached the top. Even now in my dreams I sometimes live over again that struggle in all its horror. Each step seemed like a mountain and when one had been surmounted another arose, apparently higher than the preceding. But it came to an end at last and I fell insensible through the doorway into the kitchen."

The narrator paused for breath and rest, for the memory of the incident had evidently unnerved him. Drops of perspiration stood on his forehead and his hand shook. The listeners gazed eagerly at him, waiting for the finish of the story.

COMING TO.

"When I regained consciousness I was lying on the kitchen floor, my clothes soaked in water, and a doctor was rinsing out a stomach tube.

"'Near squeak, you've had,' he said, 'Your girl caught me just in time.'

"What's happened?" I feebly asked.

"Well, you fell in through the door insensible and you may thank your lucky stars your servant's got brains. She was sitting here and instead of rushing around and screaming, she saw the paper in your hand and read it.

"She then ran round to my place and by great good luck found me just going out. The rest of the story you can imagine. But I can tell you one thing: if you hadn't taken that

iron mixture I don't think I could have brought you round.'

"All's well that ends well," continued the narrator, "but you can easily imagine how, even twenty-five years after the event, I am still affected by the smell of cyanide or prussic acid."

And the smoke grew thicker as the members of the party silently meditated upon the fact that truth is sometimes stranger than fiction.

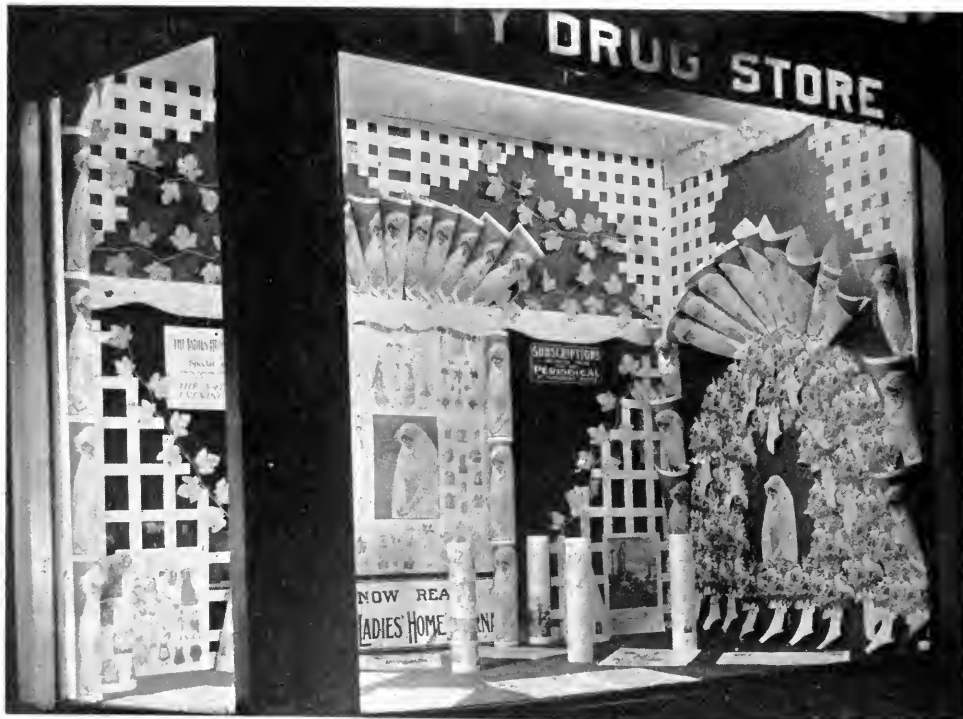
AN ARTISTIC MAGAZINE WINDOW.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

This is one of the trims I used to boost magazine sales. Once a month we give space to periodicals in this window. The profits are not so very large, but the indirect sales boost the Magazine Department to a satisfactory

The June bride whose picture appears throughout the display is very much in harmony with the things about her.

This trim is about 5 feet deep and makes a strong, clear-cut display for the far and near



position. This trim is an appropriate one for May or June—clean, neat, dainty.

The lattice-work is in white. The background body is in red, giving a clear contrast. The flowers to be used in and about the display may be changed as the season demands.

observer. It is so plain and simple in construction that it calls for no special description.

This particular window was intended, of course, to exhibit the *Ladies' Home Journal*, which is one of our best sellers.

BOARD QUESTIONS ANSWERED

AN ILLINOIS EXAMINATION.

PHARMACY.

(Continued from May BULLETIN.)

18. What is the original source of ichthyol?
(a) Why should ichthyol not be used in connection with an acid? (b) In what is it soluble?

A crude oil, ichthyol oil, resulting from the destructive distillation of a bituminous rock filled with fossil fish and found in large quantities in the Tyrol Mountains of Europe. (a) Acids combine with the ammonia and precipitate the ichthyolsulphonic acids as a dark resinous mass which adheres to the sides of the vessel, unless the acid be quite dilute. (b) Water, or a mixture of equal volumes of alcohol and ether.

19. Give the commercial or trade names of the following: (a) Acetphenetidín; (b) Phenyl Salicylate; (c) Hexamethylenamine; (d) Benzosulphinide; (e) Methyl Salicylate.

(a) Phenacetin; (b) salol; (c) urotropin; (d) saccharin; (e) oil of wintergreen.

20. How much absolute hydrocyanic acid is contained in 100 minims of U. S. P. Acidum Hydrocyanicum Dilutum? (a) What precautions are recommended for its preservation?

Assuming the specific gravity is same as water, 100 minims would weigh 95 grains, $95 \times .02 = 1.8$ grains. (a) It should be kept in small, dark amber-colored, cork-stoppered vials in a cool place.

PRESCRIPTIONS.

No. 1501. *FOR MISS WHITE.*

℞ Magnesii sulphatis,
Plumbi acetatis.....ää 15 Gm.

M. ft. pulv. in scat. exhib.

Signa: External use only.

Aug. 10, 1907.

DR. BLANK.

If dissolved in water the ingredients react, forming an insoluble lead sulphate.

No. 1502. *FOR MISS BLOCK.*

℞ Ferri sulph.3ss.
Potassii carb.gr. xviii.

M. ft. pil. No. xii.

Signa: One p. c.

Aug. 2, 1908.

DR. PRICE.

Follow the official method for making pills

of ferrous carbonate. Rub up the ferrous carbonate with a sufficient quantity of glycerin and water, then add the ferrous sulphate and sugar, previously triturated together to a uniform powder, and rub the mass thoroughly till it assumes a greenish hue. When the reaction has terminated, incorporate tragacanth and althæa, and, if necessary, add a little more water, so as to obtain a mass of pillular consistency. Divide this into 12 pills.

No. 1503.

FOR MISS BROWN.

℞ Hydrargyri oxidi flavi.....gr. xx.

Ungu. zinci oxidi ad.....3ss.

M. ft. ungu.

Sig.: For external use.

Aug. 3, 1907.

DR. BLANK.

Rub up the yellow oxide of mercury very thoroughly with a little of the zinc oxide ointment till perfectly smooth and then incorporate the rest of the zinc ointment. Rub the two ointments together until the white and yellow colors of the two ointments blend into one.

No. 1601.

FOR MISS BLAKE.

℞ Olei cinnamomi..... 0.25

Sacchari 2.50

Zingiberis 1.25

M. ft. pulv. in Chartulæ V div.

S.: One c. a.

Aug. 31, 1907.

DR. B. LAKE.

Mix the oil of cinnamon with the sugar and then with the ginger. Dispense in wax papers to prevent evaporation of the volatile oil.

No. 1602.

FOR MR. WHITE.

℞ Sodii bicarb.,

Pulv. aloes.....ää gr. v.

M. ft. capsulæ tal. No. V.

S.: One h. s.

Sept. 1, 1907.

DR. BLANK.

This mixture will darken, giving a reddish-brown mixture, but can be dispensed. Be sure to have five grains of the mixture in each capsule.

No. 1801.

FOR MR. FRANCIS.

℞ Hydrarg. chlor. corros.....0.16 gramme.

Ammonii chlor.3.20 grammes.

M. ft. pil. 15.

S.: Doctor will give directions.

Nov. 1, 1908.

DR. BLACK.

Use glucose, syrup, and wheat flour as excipients.

(To be continued.)

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

ANOTHER VACATION IDEA.

To the Editors:

I see you are going to publish some articles* describing the way druggists spend their vacations. I enclose three small photographs which I took last summer at "Camp Lanac," on Sycamore Island, Maryland—up the Potomac River about eight miles above Washington.

This camp was composed of five young men from my neighborhood in Washington. They



Mr. Fuhrmann and his family at "Camp Lanac" on Sycamore Island in the Potomac river near Washington.

had two large, square tents on an elevated platform with a porch awning extending across the front of both, making them very dry, comfortable, and convenient. These were used for sleeping quarters, while a third tent was utilized as a kitchen and a storeroom for provisions.

The young men were employed in the city during the day and went out to camp every evening after work. A trolley line running near-by made it convenient to the city. This gave them plenty of outdoor air and sport on evenings and Sundays, and still did not interfere with their employment. They did their

*Two appear elsewhere in this issue of the BULLETIN.—THE EDITORS.

own cooking. Canoeing, fishing, and bathing are good at this place. They spent five months, from May to October, in this way at very little expense. Sundays they entertained large numbers of their friends, as one



A group of visitors at the camp.

of the pictures will show. The Fuhrmanns were "among those present" on one occasion. The picture of the Fuhrmann family shows that they are no small crowd by themselves. A very enjoyable day was had with our friends, and we thought this a very unique way of spending the summer.

Of course many druggists do not have their business sufficiently well organized to permit them to be away so much, but I thought the



After dinner everybody turned in and helped scour the pots and pans!

plan might suggest ideas to others that would work out well for them.

The day being cloudy, the pictures do not show up very clearly.

Washington, D. C. CHAS. J. FUHRMANN.

A CLEVER RUSE.

To the Editors:

Druggists in the United States are not the only ones who are occasionally the victims of "sharpers." In Sydney recently a great many members of the trade have been caught napping by a trick played on them by a very clever rascal. Apparently he is a morphine subject. He proceeds in the following way: He first secures a four-ounce bottle of Collis Brown's Chlorodyne. Having emptied it, being very careful not to damage the wrapper or seal, he refills it with water, replacing the wrapper and seal very carefully.

With the package up his sleeve, he enters the pharmacy and asks for a four-ounce bottle of chlorodyne. When it is handed him, he inquires the price, appears to hesitate whether he will take it, and then asks about something else, possibly a doctor's telephone number, or address, or some other question which will distract the attention of the druggist. He then does the quick-change act, placing on the counter, or show-case, the bottle which he has filled with water, slipping the druggist's property into his pocket.

By the time the druggist has come back to renew his conversation, he has made the change. Having obtained what he wants, he makes some excuse for not taking the bottle, or perhaps says he will take it, but must go out and get the money for it, or asks that it be wrapped up, and he will call again for it. He then makes his exit, and that is the last seen of him. In some instances he has been so quick that it has only been necessary for him to have the druggist look out of the door, or turn around. After this smooth gentleman leaves the store, the pharmacist naturally either wraps the package or puts it back on the shelf. If the former, when it is not called for in a reasonable time, it is unwrapped, and put back into stock. The druggist does not know he has been victimized until some one to whom he has sold the bottle containing the water brings it back and abuses him.

This may be an old trick in America, but it is a new one in Sydney, and strange to say has been practiced on a great many druggists here. One can imagine the disgust of the purchaser of the watered bottle when he wishes to use the chlorodyne, and finds nothing in it but water. In some cases it has taken a lot of

talk to convince the buyer that it was not the druggist who did the substituting.

Possibly this may be of interest to your readers, and the trick may be new to a great many of them. Having been in business myself in America for about forty years, and not having come across this trick, I believe it will be a new one on some. JNO. H. ALLEN.

Sydney, Australia.

SOME BODEMANNIAN REMINISCENCES.

To the Editors:

When you get to be three score and over (like me!) you will indulge in reminiscences (like me). You have had more or less in the BULLETIN during the last two or three months about tinct. ferri pomat. I have looked up that first contribution of mine to the technical press in 1863. This product enjoyed quite a run at that time as a mild iron preparation. The old way of making it took about six months. My preceptor (a grand old man indeed if he was not a Ph.G.) made me experiment with the berries of *Sorbus aucuparia*, which are rich in malic acid. Then, instead of soaking the metallic iron in the malic juice, the foxy old fellow made me dissolve freshly prepared ferric hydrate in the juice—and the trick was done in as many hours as it had taken months before!

As I have intimated, my preceptor was a practical, self-educated man, and he was full of the milk of human kindness. The German apprentice is cooped up in the den without any time off except every other Sunday. He sleeps, eats and works in the same house—no breath of air—no let up. Contrary to this, however, when summer came along our boss chased us out, right after the midday dinner, about once a week. His instructions would be: "Go into the woods, boys, pick up flowers and plants, and have a good time. Call on Farmer Butterschmidt, who deals with us, show him some attention, and he will set up fresh eggs and butter as a lunch for you."

The next day we had to classify the plants gathered. Botany, the nightmare, was made easy and pleasant!

As a general thing the German apprentice in 1863 received no salary. He got his food and his lodging as a reward for his hard work. My case was an exception. I got 50

thalers for the four years because Bremerhaven was full of confederate vessels during the blockade, and because I had picked up enough English in my Hamburg school to take care of that trade.

Chicago, Ill.

WILHELM BODEMANN.

ADVERTISING SCHEMES: WHAT KIND PAY?

To the Editors:

Does advertising pay? I mean strictly ethical advertising, where no special price inducements are offered.

I submit several sample ads. which were

<p>Drug Talks</p> <p>YOU cannot tell by looking at the bottle whether your prescription has been correctly compounded or not.</p> <p>CONFIDENCE in the DISPENSER is what you must rely upon. Your physician will tell you we are worthy of that confidence.</p> <p>Bring us your next Prescription.</p> <p>GIESBURG'S PHARMACY SEVENTH AND MINNESOTA.</p> <p>Worth Heeding!</p>	<p>Drug Talks</p> <p>We Do Not Advise the use of patent medicines. If you are sick you had better consult the family physician. Bring us the prescription where it will be compounded by men of over twenty years experience in the drug business.</p> <p>GIESBURG'S PHARMACY SEVENTH AND MINNESOTA.</p> <p>Worth Heeding!</p>
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run in our daily paper for weeks at a time and which have not produced the desired results. Neither have they brought any letters or words of commendation from the local physicians, although all our efforts were made

<p>Drug Talks</p> <p>Our One Aim and Ambition is to have all of our medicines pure, fresh and of standard strength.</p> <p>That is the only kind of medicine that cure and that is the only kind you want, and if you will bring your prescriptions here, that is the only kind you will get.</p> <p>FOR EXPERT MEDICINE SERVICE COME TO</p> <p>GIESBURG'S PHARMACY SEVENTH AND MINNESOTA.</p> <p>Worth Heeding!</p>	<p>Drug Talks</p> <p>IF YOU ARE SICK</p> <p>the best thing you can do is to call on your physician and tell him your troubles. Let him prescribe for you, and then if you want to get what he has ordered, bring us your prescription. We don't substitute for the sake of a few cents extra profit. Our prices are right, too. We want your trade and mean to get it by giving you the best goods for the least money.</p> <p>GIESBURG'S N. E. Cor. 7th and Minnesota.</p> <p>Worth Heeding!</p>
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in their behalf. The seed seems to have fallen on barren soil.

For years I used to run ads. in church di-

rectories, programmes, etc., calling attention to the fact that "no liquors were sold in my store," and although I was about the only druggist who could claim that distinction in this city, no preacher ever congratulated me upon that point. The only way to reach the public's heart is through its pocketbook. If you have any special inducements to offer, advertise. If you haven't, *don't*.

Kansas City, Kansas.

J. W. GIESBURG.

LAST WILL AND TESTAMENT OF THE GROUCHY DRUGGIST.

To the Editors:

Now that the new school of preventive medicine has announced the millennium of drugless therapy, I, who in the course of centuries have grown old and decrepit in the service of suffering humanity, have seen fit to make my last will and testament as I am about to depart from the scenes of professional activity.

To Father Time I bequeath all of the long hours spent in the daily routine, from mornings at seven o'clock until ten o'clock at night, year in, year out, without vacation, including Sundays and holidays; also the hours snatched from sleep when responding to the night-bell in order to accommodate the sport who felt in need of a bromo-seltzer after a night's revelry.

To the Postmaster-General of the United States I bequeath all the profits made during a long lifetime on the sale of postage stamps, in order that he may avoid another deficit at the end of the present fiscal year without making wealthy manufacturers and jobbers pay advanced rates on the advertising pages of their house organs; for I am firmly of the belief that these advertising pages not infrequently are the best part of the issues to which they are attached, and hence should be protected like all special interests.

To the aspirants to other callings I bequeath all the liberal education which I have always begrudged my own apprentices for fear that they might learn to love their calling rather than sweep the store, or dress show windows and wash bottles, or do such other menial service for which most people engage porters or "scrub ladies."

To the future student of pharmacy I be-

queath the study, for the mere love of study and truth, of all of the intricate problems of structural chemistry, such as that of the quinine molecule, so long sought after by the research chemists of the "Farbenfabriken" of the fatherland, but not found so long as this discovery might have served a useful purpose.

And lastly, to my successor, the pharmacist of the future, I bequeath all the scientific and professional longings which I never knew, and for which I never had any use whatsoever, knowing full well that his idealism will avail him no more in the battle of life than my pessimism has availed me.

PHARMAKOPHILOS.

PERMITS TO PRACTICE PHARMACY SHOULD BE DISPLAYED.

To the Editors:

The following short communication was read by the writer at a meeting on April 25 of the Executive Board and Publicity Committee of the National Association of Pharmacologists in Columbus, Ohio. If you care to publish it in the BULLETIN we should be glad to have you do so:

Some of the pharmacists and their clerks are sadly negligent in the matter of complying strictly with that portion of the law that pertains to the exposing of certificates issued by the Pharmacy Board. Hence, I make no apology for addressing my fellow members and officers of the National Association of Pharmacologists on this subject.

The law regulating the practice of pharmacy was enacted, first, for the safety of those needing drugs and medicines; and secondly, for the welfare of the pharmacists themselves. Every well-meaning registered pharmacist, whether possessing a "master's" or "assistant's" paper, should post his license in a conspicuous place.

He owes it to his customers, and he owes it to himself—to the former for *their* protection, and to himself for *his* protection. To prove the value of the certificate when exhibited, I will cite an actual occurrence that came under my observation some years ago.

I was clerking in a store in which all certificates were given such a prominent location

that they could not escape the notice of our patrons. One day a lady came into the store to have a prescription filled; and as she handed the order for medicine to one of the clerks, she remarked: "We have a drug store near our home, but we do not let our druggist compound our prescriptions as he has no license displayed."

Subsequently I learned that this pharmacist employed only cheap, unregistered help. Perhaps that was why he withheld his certificate from public view. If that be the case, he deceived no one but himself.

The public is well aware of the existence of the pharmacy law, and they have a perfect right to know whether or not the person serving them has complied therewith.

Columbus, O.

CHAS. H. BOWERSOX.

MARKING PRESCRIPTIONS.

To the Editors:

It seems to me that the druggists are very careless about marking prescriptions when they give their customers a copy. I find that out of the many prescriptions I get, several are copies of the original given by druggists to their customers. People come from all parts of the country, and when one of these prescriptions is presented to be filled without an N. A. R. D. mark on it, a person is in doubt about the price formerly charged.

Fellow druggists, why don't you mark prescriptions so that other pharmacists will know what you have charged?

Suppose a family moves into your community to live and has a prescription which I have filled at a certain price. If I failed to mark it and you fill it and charge a few cents more, you lose that family's trade. For they believe you to be a high-priced man and go to the other store to trade, although you may not have charged an unreasonable price. Little things like this degrade the drug business.

I find many prescriptions with druggists' private marks on them, but if they would only use the N. A. R. D. mark instead, we druggists would know what had been charged. Let us make an effort to mark our prescriptions and thereby try to uplift the drug business some day to a profession.

Bridger, Mont.

S. E. HUGHES.

HE NEEDED HELP.

To the Editors:

You have had a lot of curiosities in the BULLETIN, but I am sending you one which

Doctor
Dear Sir
Will you Please give me an bottle
Elixir for Clean my stomach
I have little trouble with
Vomit Every day.
yours respectfully
your humble Servant
Peter Re

is not to be sneezed at. Did he get the "elixir?" He certainly did. F. C. W.

FROM SCOTLAND.

To the Editors:

"The greatest ever" is about the only expression in your "language" which I can find to cover the last number of the BULLETIN. Your journal is very interesting and readable, although many of the methods used for getting and keeping trade as advocated by pharmacists on your side would hardly suit over here.

DAVID W. ROBB.

Scotstown, Glasgow, Scotland.

To the Editors:

I have always liked your journal and think it one of the cleanest published.

W. C. BENDER,
 Pres. Missouri Pharmaceutical
 Association.

St. Joseph, Mo.

* * *

To the Editors:

We cannot afford to be without the BULLETIN, so you may send it for a couple of years anyway.

KOLSCH'S PHARMACY.

Leadville, Colo.

* * *

To the Editors:

Enclosed find \$1.00 for the best drug journal that comes to my desk!

Deepwater, Mo.

J. M. MARMADUKE.

PROFITS AND EARNINGS

AN INCOMPLETE STATEMENT.

A California druggist submits a statement of his business for 1910. He adds: "Will you please tell me how we stand including gross and net gain or profit, percentage of profit, cost and expense? The figures have been given to two bookkeepers with as many results. Their opinions vary."

Inventory, 1909	\$ 3,677.37
Inventory, 1910	4,200.68
Fixtures, 10% depreciation.....	1,626.11
Cash sales	19,656.90
Accts. receivable, less \$50 doubtful.....	742.94
Cash on hand, 1909.....	1,504.53
Cash on hand, 1910.....	618.58
Bills payable, none.	
Note payable	1,600.00
Cr. bal. jobber	25.00
Purchases, 1910	11,187.04
Transport charges	323.50
Cash discounts	123.49
Personal withdrawals	3,787.39
Expense of doing business.....	4,816.97

One thing is evident, our California friend is spending a lot of money. He drew out \$3787.39 for personal expenditure, which puts us in a critical mood at the start. He borrowed \$1600 without telling us whether he invested the money in his own business or a California fruit ranch. Maybe he spent it. We can't tell from the statement where it went.

In determining the profits for 1910, we find first that the inventory increased from \$3677.37 to \$4200.68, or \$523.31. Since bills payable and bills receivable are not given for 1909, we shall have to assume that they are the same as those of 1910. Next subtracting the purchases from the sales (\$19,656.90—\$11,187.04) = \$8469.85. Deducting the freight charges which properly enter into the cost \$8469.85 — \$323.50 = \$8146.35 gross profit.

Subtracting the expenses from the gross profit, \$8146.35—\$4346.32=\$3800.03. Notice we omitted from expenses one item which was charged there, namely, \$470.65, the interest on the investment. But the cash on hand shrunk from \$1504.53 in 1909 to \$618.58 in 1910, a shrinkage of \$985.97. Subtracting \$985.97 from \$3800.03 we get

\$2814.06. Adding the increase of inventory
 $\$2814.06 + (\$4200.68 - \$3677.37) = \3337.37
 net earnings of the store during 1910.

Dividing the gross profits by the total sales, $\$8146.35 \div \$19,656.90$, equals 41.44 percentage of gross profit. This is exceedingly large. Subtracting the expenses from the gross profits and dividing the result by the sales $(\$8146.35 - \$4816.97) \div \$19,656.90 = 16.93$ per cent net profit. Subtracting 16.93 from 41.44 we find the percentage of expense to be 24.51.

WHERE IS HE AT?

"G. K. A." submits the following details about his business and requests us to discuss them:

Assets	\$4870.91
Liabilities	2850.45
Difference	2020.46
Stock in trade.....	2212.81
Amt. goods purchased	5524.50
Cash sales	8144.05
Furniture	1795.00
Freight	24.51
Postage	34.64
Rent	240.00
Light account	42.50
Interest	69.76
Wages	972.50
Other expenses	232.00
Manager's salary	1075.00

This man appears to be considerably in debt. His liabilities, \$2850.45, exceed his own equities in the business, \$2020.46. While the assets are there to offset his indebtedness, it is very evident that G. K. A. is doing business largely on the other fellow's money. If hard times should come along and his creditors were to say "Pay up," where would he be? Our friend might find himself in the position of the young proprietor who tries to do business on the jobber's capital.

Our correspondent says his assets are \$4870.91, his liabilities \$2850.45, which makes his equities in the business \$2020.46. But in detailing his assets he shows items of stock amounting to only \$2212.81 and furniture \$1795.00, making a total of \$4007.81 instead of \$4870.91 as given in the statement. Deducting his liabilities from \$4007.81, his net worth is \$1157.36. This shows a discrepancy of \$863.10.

Allowing that the figures submitted cover the results of a year's operations ending on a

specific date, unless we have a list of figures covering similar items on the same date of the year previous, we cannot tell the accretions or profits. We can tell the man's worth, but not his profits. Thus we are not able to tell how good are his prospects of paying off his indebtedness.

We can't determine the profits by subtracting the purchases from the sales because we do not know whether all the goods bought were actually sold.

This statement only emphasizes the need of having complete data for the beginning as well as the end of a year's business, if one expects to tell much about his progress.

A MICHIGAN DRUGGIST'S STATEMENT.

The following is the statement of the business of a Michigan druggist which he submits for our comments:

Inventory April 1, 1910.....	\$1932.04
Inventory April 1, 1911.....	2877.03
Merchandise bought during the year.....	2595.72
Cash sales for the year.....	3900.00
Total freight charges.....	41.89
Total cartage charges.....	12.22
Store expenses for the year.....	50.48
Bills paid in cash.....	29.64
Advertising account	19.45
Cash taken from till.....	234.14
Goods taken from store.....	23.52
Cash for personal use.....	199.34
(Last three being household expenses.)	
Cash paid for lumber.....	14.51
Insurance	103.62
Revenue tax	25.00
Taxes	20.26
Merchandise paid for but not on hand.....	23.85
This last item was inventoried in the fixtures at the regular retail price.....	35.00
Total checks drawn for all purposes.....	\$3914.40

In discussing this statement we shall confine ourselves to the arithmetical calculations as they are very plain in their meaning.

Inventory, 4/1/10	\$1932.04
Bought during the year.....	2595.72
Bought for cash.....	29.64

Gross merchandise	\$4557.40
Inventory, 4/1/11	\$2877.03

Merchandise sold	\$1680.37
Expenses:	
Freight	\$ 41.89
Cartage	12.22
Store expenses	50.48
Advertising	19.45

Lumber	14.51
Rent	8.00
Insurance	103.62
Taxes	45.26
	<hr/>
	\$ 295.43
Adding salary	1000.00
	<hr/>
Total expenses	\$1295.43
Personal expenses:	
\$234.14	
23.52	
199.34	
	<hr/>
\$457.00 included in salary.	
Receipts	\$3900.00
Expenses	1295.43
	<hr/>
Net receipts	\$2604.57
Merchandise sold	1680.37
	<hr/>
Net profits	\$924.20

This net profit is too large. Let us check up his total cash payments to see where the trouble is:

Merchandise bought	\$2595.72
Net store expenses	295.43
	<hr/>
	\$2891.15
Personal cash	199.34
	<hr/>
Total payments	\$3090.49

Thus he only accounts for \$3090.49, when he claims having drawn checks for \$914.40. Take off the difference of \$900 and he is only making a bare living.

Some bills payable must have been omitted from his statement. Even if he has a \$2000 building and a \$3000 stock, his whole investment is only \$5000. To make a net profit of \$924 over and above a salary of \$1000 with a small investment like this is practically impossible.

A TEXAS BUSINESS.

One of our readers says that his business is "very, very profitable." While we take his word for it, the statement submitted doesn't prove it. He writes:

"My stock, including all the fixtures, the safe, and desk, amounts to \$2100.06. The only help I had was a boy who began work on June 1 and continued to September 15, when he was taken sick and quit for the year.

"I make a pretty full line of 'my own' prep-

arations, and my profit is very, very satisfactory.

"My low rent is accounted for by the fact that I rented a building, then sublet two-thirds of it, thus reducing my own rent to \$12.50. My storeroom is 12x30 feet.

"This is a town of 12,000, with five other drug stores, four of which would be a credit to any town. I advertise mine as the 'One-Half Drug Store.' Traveling men frequently tell me that I have the 'best thing in town.'"

CASH SALES AND EXPENSES FOR 1910.

Rent	\$150.00
Clerk	175.00, 3½ mos.
Light	75.00
Phone	36.00
St. tax	12.00
Ins.	30.00
	<hr/>
	\$478.00
Stock, including all fixtures.....	\$2100.00
Sales	\$8187.00

On the face of things this proprietor is a hustler. His stock, even including fixtures, is only \$2100, while his sales amount to \$8187. He is turning his capital over about four times a year, which is doing remarkably well. Two or three times are considered satisfactory. That he is certainly selling goods is very evident, but at what price? Anybody can give goods away or roll up a large volume of business by selling closely. Without the purchases we can't tell from the sales whether our correspondent is making a profit. He may be losing money for all we know.

His expenses are small. They total only \$478.00. Dividing this by the sales, \$8187, to find the percentage of expense, we get 5.8, which is too low to be correct. Several expenditures must have been omitted. Even if we add a thousand dollars for the manager's salary, we get only 18 per cent and a fraction, which is still so small as to make us suspicious that it does not tell the whole truth.

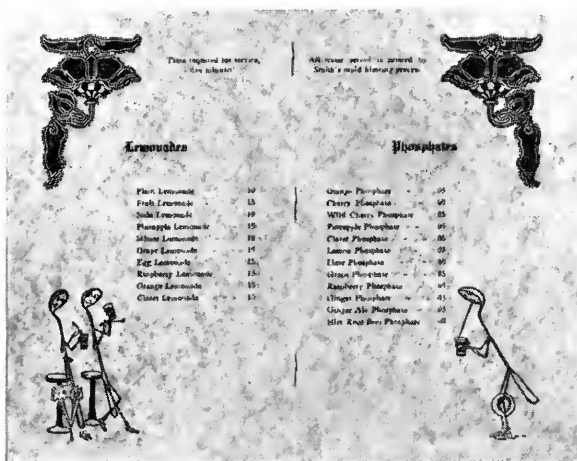
A BOMBAY magazine, *Indian Education*, gives some fresh specimens of Babu English. Of one schoolmaster a pupil wrote this description: "He was a stern-faced peddlegog." Another writer says that a certain official, "a nice majestic gentleman, inhabits a most pompous bungalow." An essay on "The Town in which I Live" closes: "And we bewholed the hole pherment of heavens and stars and the school sticking reflected upside down in the pond erected by our worthy Collector."—*Troy Times*.

THE SODA FOUNTAIN.

"NO SODA LIKE WIECHMANN'S."

By F. G. EBNER.

"And ye shall know the truth" is a biblical excerpt, which holds good with those who partake of the soda water dispensed by Wiechmann Brothers, two "live wires" who operate an apothecary shop in Wausau, Wis. Wausau is a town of 17,000, but from what you see of the place, it impresses one as a hummer from a business view-point. Considering the fact that it is a wide-open town where plenty of Milwaukee's favorite beverage is dispensed, the Wiechmann boys found



Two inside pages of the Wiechmann booklet.

there were a great many people who didn't drink beer when they could get good soda, or could not drink beer because their physician advised not to, or because their digestive organs wouldn't stand for it. The Wiechmann boys "got busy." When the Wiechmann boys "get busy," it means something.

One of the boys went over to the display rooms of some of the big soda fountain concerns. Within two weeks after March 1 they had a big sanitary soda-water fountain smiling at every man, woman, or child who entered the portals of this striking pill shop.

While the soda fountain was being installed, they called in several printing establishment representatives, and within a very short time "a little soda-fountain drink booklet" was evolved which beats anything ever concocted by an Elbert Hubbard or any other literary genius not excepting any one.

It was a pretty piece of printing. The cover was green. The inside pages were white with a greenish-blue mottled effect. The type throughout was black. We are reproducing two of the inside pages showing a part of the soda menu. In dimensions the booklet was 4 by 6½ inches. The booklet certainly brought business to the fountain.

While the Wiechmann boys say they never took a literary course, they are right there when it comes to

putting out something nifty or tasty, whichever they prefer. Being of Irish descent they chose green as the color scheme of a six-page snappy booklet.

From the text, it is evident that they are town boosters. They don't forget to say that Wausau is the greatest town in the country. The store itself represents the personality of the men behind it. Little signs call attention to various articles for sale. With their good, up-to-date soda concoctions, polite and quick service, they have won over many people who never drank soda. They have made the resident people of Wausau realize that there is another thirst quencher besides the "flowing bowl" of the rathskeller.

"BANANA SPLITS."

We know that soda dispensers are interested in "banana splits" for the reason that one or two recipes for this dish were contributed to our recent soda formula contest. The *International Confectioner* for April has a rather comprehensive article on the subject, from which we quote in part as follows:

"The name 'banana split' includes the sundaes which have as their base a banana, peeled, and then split in two lengthwise. These are served in some oblong dish. The old-fashioned bone-dish makes a very attractive service. Some use a small platter, but they are rather too shallow. The fountain houses, many of them, have an oblong glass dish, with dipper sides, which makes a very neat service. In selecting a dish to be used, much taste may be displayed, and either glass, china, or silver may be used. When these banana sundaes are properly and neatly served, they are very attractive, and make good sellers; and they should bring a good price.

"But in some stores where ice-cream soda, etc., is sold for five cents, the banana split is sold at ten cents. Where this is done, some use only one-half of the banana, but it is better to use a whole small one. But we do not advise the sale of these combinations for less than fifteen cents; and many of them should bring twenty cents. Our experience leads us to believe that fancy sundaes can be made to produce a reasonable profit, and to do this you must obtain fifteen cents for these fancy combinations, where you charge ten cents for the plain dish of ice cream. In the following formulas, where the expression split banana is used, it refers to a banana that is peeled, split in two lengthwise, and then placed in the dish.

BANANA SUNDAE, PLAIN.

Place two No. 20 mounds of vanilla ice cream close together on a split banana, and cover with whipped cream so as to make an oblong mound. Sprinkle the whipped cream with grated sweet chocolate and drop a maraschino cherry in the center.

BANANA BEST.

At one end of a split banana put a No. 20 mound of vanilla ice cream, and at the other a No. 20 mound of strawberry ice cream. Over each mound of ice

cream pour some cherry syrup and top with a cherry. Sprinkle with chopped walnut meats and put a small ladle of whipped cream between the mounds of ice cream, and top with a green and a red cherry.

BANANA FRUIT AND NUT SUNDAE.

At each end of a split banana place a No. 20 mound of vanilla ice cream. Between the mounds put a portion of whipped cream, and top it with a maraschino cherry. Around it drop a few slices of citron. Cover one of the mounds of ice cream with chopped mixed nuts, and the other with chopped mixed fruit, or a good fruit salad.

BANANA FRUIT SUNDAE.

At either end of a split banana place two No. 16 cones of vanilla ice cream. Over each cone pour a small quantity of crushed fruit. The same fruit may be poured over both cones, or a different fruit over each, to suit the taste. Place a portion of whipped cream in the center, and top with a cherry.

BANANA NUT SUNDAE.

On a split banana place two No. 20 mounds of ice cream, putting a spoonful of chopped nut meats between the mounds of ice cream. Over each mound of cream pour a different crushed fruit. Crushed cherries and pineapple make a good combination, or a portion of whipped cream may be placed in the center and some nut dressing, such as maple pecan, or chocolate walnut, poured over one of the mounds of ice cream.

BANANA SUNDAE A LA DELMONICO.

Place a small fern on an oblong dish, and lay a split banana on it. On the banana place two No. 20 mounds of vanilla ice cream. Over one of the mounds pour some chocolate syrup, and over the other pour some coffee syrup, and top with whipped cream.

TWO ORIGINAL SPECIALTIES.

Two formulas for novelties at the fountain have been contributed by readers of the BULLETIN:

FROZEN TAFFY.

(W. T. Beam, Moundsville, W. Va.)

Here is a ready seller:

Pure cream	1 gallon.
Maple syrup	½ gallon.
30 eggs well beaten.	

Mix and freeze. Serve as ice cream at 10 cents.

This has tough texture, is yellow, and resembles taffy.

HEAVENLY SLUSH.

(O. Roy Steadman, Toronto, Ontario.)

We have had the greatest success with a soda specialty which we call "Heavenly Slush."

Maple walnut ice cream (we use a No. 12 disher).
Three or four sliced dates.
Maple syrup, ½ ounce, poured over the mixture.

Cover with whipped cream and a few nuts.

SODA-WATER PUBLICITY.

E. F. White, writing in *The Spatula*, offers some helpful hints on the sale of soda water. He says in part:

In some way the public must be apprised of what you have in the way of drinks and how excellent they really are. This bit of judicious self-praise will start the public talking, and then you must give them something to talk about. Have the quality of your drinks above question and have them served properly, so that they will be worthy of public praise. If you are enthusiastic and persistent in spreading the news you may be sure that you will not lack help, but just as surely as you stop your efforts the public will stop talking about your drinks. This class of advertising is expensive and cannot be followed up all the time, but something must keep things going between these printer's ink efforts.

The next best advertising is that which is done on the premises. An occasional window display of something that advertises your fountain is a good idea. Much that can be used in this line is of course by nature perishable, and therefore it cannot be kept up all the time. Nevertheless, advertising always costs money and one can as well put a dollar or two into fruit for display purpose once in a while as into anything else. You must not expect that you can obtain very much real good advertising free.

A bulletin board set out on the sidewalk is made to do good service in many places in telling the public that you have soda and something regarding its quality. By far the most effective of all local advertising is the window strip display announcing some of your fountain creations with some simple expression intended to convey its superiority over the general run of that class of drinks such as "Our Delicious Egg Drinks," or "Our Chocolate is unsurpassed." Do not use too many of these strips at once. Use them merely as a means to bring the public in and tell them what you have after they are at the fountain.

When the customer has been drawn into your store there are various ways of informing him of what you have. The menu card is a good way. The length of menu and the number of drinks must, of course, depend upon your location and the size of your fountain. In a small store where space is limited it is best to push only the popular drinks.

But the menu at best is slow, very few comparatively will take the trouble to read it over. What is needed is plenty of good plain neat signs about the fountain announcing not only the special and fancy drinks but also the plain ones as well.

These signs are valuable. Don't be so fastidious about the appearance of your fountain that you don't want them, but have them just as nice as you like. Some fountains have more mirrors than they need; some of them might easily be turned into lists of beverages. Made on the glass in black and gold letters they would look very nice.

Have your signs so plain that at a glance one can select something from the list that will suit him and his purse. Always have the price on your signs. Never

try to get the public to order a 10-cent drink under the impression that it is a 5-cent one.

For pushing a special drink, or for telling of the excellence of your chocolate, package slips are excellent. Let them be long, narrow slips with the simple explicit wording in the center, "Smith's chocolate ice cream soda—my! but it's good!" Don't use hackneyed phrases in such cases. Branch out into your own language.

THREE CHOCOLATE FORMULAS.

Last month we printed many recipes that were contributed to our prize contest for the three best soda formulas. Here are three methods of making chocolate syrup that were held out for reasons of space:

COLD CHOCOLATE SYRUP.

(R. J. Jenkins.)

In making a chocolate syrup it is a very common mistake on the part of dispensers to use vanilla extract. Such a flavor is not strictly speaking a chocolate but rather a mixture of vanilla and chocolate. Here is one of the most satisfactory chocolate syrups I know of:

Granulated sugar	48 pounds.
Cocoa	4 pounds.
Boiling water	4 gallons.

Mix the cocoa and sugar well before adding 1 gallon of hot water, add water slowly, stirring all the time, and stir until the mixture is entirely free from lumps. Put it on the stove, add the balance of the water and bring to the boiling point, *but do not boil.*

CHOCOLATE SYRUP.

(J. W. Giesburg, Kansas City, Kansas.)

Cleanliness and service combined with pure syrups and fruits first, last and all the time tell the story of

success or failure with a fountain. And speaking of syrups stick a pin right here, as chocolate is by far the most popular and called-for flavor at the fountain. Be sure you have the kind that "tastes like more." None of our customers ever leave any in the glass.

Take 18 ounces of powdered chocolate, to which add 24 ounces of boiling water, stir well until perfectly smooth, and add $\frac{1}{2}$ gallon of hot syrup. Stir until there are no lumps, strain, and add $1\frac{1}{2}$ gallons of hot syrup; boil 15 minutes. When cool, add an ounce of vanilla extract and strain again. "That's all."

CHOCOLATE SYRUP.

(Lou E. Phelps, East Smithfield, Pa.)

This chocolate syrup is a favorite with us:

Greaseless powdered chocolate.....	2 ounces.
Granulated sugar	$1\frac{1}{2}$ pounds.
Hot water	$1\frac{1}{2}$ pints.
Vanilla extract	1 teaspoonful.

Mix the chocolate and sugar in a porcelain or agate dish, pour in the cold water to make a stiff paste, then add remainder of the water, stirring to remove lumps. Boil the mixture 15 minutes, stirring with a wooden paddle to keep it from burning. When cool, add vanilla.

LEMON BEVERAGES.

CYCLE PHOSPHATE.

Into an eight-ounce glass, draw one-half ounce of lemon and one-half ounce of orange. Add two or three dashes of phosphate and fill with carbonated water.

ENGLISH SHERBET.

Into a ten-ounce glass, draw three-fourths of an ounce of grape syrup and three-fourths of an ounce of pineapple syrup. Into this squeeze the juice of one-half lemon, then fill with carbonated water and mix.



A CHINESE ESTABLISHMENT.—This is the interesting building in Amoy, China, occupied by the Fukien Drug Co., Ltd. The photograph, neatly mounted on a folder, was sent out with greetings to the firm's friends and customers.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

An Ethical Ad.—

That it pays even the purely ethical pharmacist to advertise has been the experience of Leonard A. Seltzer, of Detroit. Some time ago he ran the following

Ask Your Physician

In case of illness in your family the best of medical attention and the best in prescription service is none too good. It is well worth while to be absolutely certain about medicine, and the best way to be sure is to send all prescriptions to Seltzer's Professional Prescription Pharmacy, because your physician knows that he is certain to get just the medicinal action that he expects from the remedy prescribed, if the prescription is prepared by Seltzer.

Our Reputation

We have a reputation, not only locally, but all over the United States, for conducting the drug business upon a plane that is far above that of any Pharmacy in this part of the country. We do not wish to appear egotistical—we are only proud of the results we have secured.

Our Policy

It has always been our policy to concentrate our efforts upon the preparation and dispensing of medicines, and to confine our sales to medicines, to articles used in their application, and to such other articles as are required in caring for persons needing medical attention.

Our Prices

Our prices are always reasonable—no higher than should be charged for the quality of goods and the high-class service we supply. It is a mistake to suppose that because we might justly charge more than our competitors that we do so; we positively do not, as we have proven many times by actual tests.

For the Welfare of Your Family
We Solicit Your Prescription Trade

SELTZER'S PHARMACY

PROFESSIONAL PRESCRIPTIONISTS

32 ADAMS AVENUE WEST - - IN THE SHURLY BUILDING

Phone Main 4011

insertion in a local newspaper, using about an eighth of a page for the copy. The ad. is of interest in showing the arguments which a professional druggist of Mr. Seltzer's type can advance to customers.

An Opening Day.—

On April 15, Clarke F. Hess of Norristown, Penna., had an opening and souvenir day. He had just taken over the store from Joseph Lowenberg and took this means of announcing the new ownership.

The invitation consisted of a four-page folder somewhat larger than ordinary writing stationery, 5½ by 8½ inches in dimensions. The paper was blue and the envelope of the same color. At the upper

left-hand corner of the envelope appeared a catchy line.

Announcement

FROM HESS, THE DRUGGIST
213 East Main St., Norristown, Pa.

The cover of the invitation was simple:

CLARKE F. HESS

THE DRUGGIST

Invites You to Attend His

OPENING

and Souvenir Day

Saturday, April 15, 1911

at the Drug Store formerly owned by

JOSEPH LOWENBERG

213 EAST MAIN STREET

NORRISTOWN, PENNA.

Bell Phone 1416-A

Free Souvenirs for All

The inside pages held out to readers several inducements. Souvenirs and samples were offered free, while several popular articles were quoted at unusually attractive prices.

A Good Cigar Ad.—

A month or two ago in this department of the BULLETIN we reproduced four ads. which had been gotten up for druggists by the C. E. Zimmerman Co.



**That's what
it surely is!**

Your dreamy, pleasing satisfaction of a good smoke is greatest when you have the right kind of a cigar.—the sort you like. All brands are carried at this store. We have your favorite—moist—well kept—just ready to light up and enjoy. Call in and try one.

Tobacco is a hobby of ours. We have a stock of tobaccos—smoking and chewing—that is as well chosen and kept as that of any big city cigar store. Your inspection is cordially invited today.

**Name and address of store here
in bold face type**

of Chicago. We are now showing another one—intended for the exploitation of the cigar business. It strikes us as a very attractive ad. and one likely to produce results.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

The Best Caramel.—

A. Herzfeld says that the proper way to produce caramel is to first make invert sugar by heating with tartaric acid. This invert sugar solution is then heated in an oil-bath to boiling point, then ammonia water is gradually added while the water evaporates, after which the temperature is raised to 175-180° C. until all is caramelized. The caramel thus made is stated to be readily soluble in 80-per-cent acid, nearly tasteless, and unaffected by acids. It is also nearly twice as strong as commercial caramels in coloring power.

The Arsenic Antidote.—

G. Lockemann says that the amount of arsenic which ferric hydroxide will absorb depends upon the amount present and upon the temperature. At 0° C. 0.1 milligramme of arsenic requires 150 times its weight of ferric hydroxide, but 500 milligrammes requires only 5.4 times its weight. At 25° C. one and one-third times as much iron hydroxide is required, and at 80° C. twice as much as at 0° C. An excess of sodium, potassium, or ammonium hydroxide further reduces the absorbing power of the iron.

All Alike Legally.—

O. Gros says that weak acids favor the anesthetic action of cocaine, eucaine, etc., while strong acids reduce it. For instance, novocaine bicarbonate is five times as powerful as an anesthetic as novocaine hydrochloride. Cocaine, novocaine, eucaine, alpin, and stovaine are about equal in anesthetic power as bases, but their hydrochlorides differ in power. Eucaine and stovaine are the most injurious to tissues, while novocaine is least injurious to the tissues.

Canadian Enterprise.—

A plant for the manufacture of alcohol from sawdust is soon to be established in Ontario, Canada. The sawdust is to be digested with sulphurous acid under a pressure of 100 pounds and the glucose so obtained fermented. The residue is said to be of value as a cattle food. One ton of dry sawdust will yield 30 gallons of 94-per-cent alcohol, 76 pounds of acetic acid, and $\frac{3}{4}$ ton of stock food. The plant will have a capacity of 100 tons of sawdust per day.

The Evolution of Protoplasm.—

A Russian chemist says that there are two forms of protoplasm—"ameboplasm," which is characterized by ameboid movements, requires oxygen for development and withstands temperatures up to 120° C., and "mycoplasm," which is found in molds, bacteria, etc., which possesses no movement, does not require oxygen, and withstands temperatures up to 200° F.

Gentian, Dried or Fermented.—

Bourquelot and Bridel state that gentian roots which have been placed in piles and allowed to ferment during the drying process lose the gentiopicroin, but when

dried in an oven, or in thin layers, the gentiopicroin is preserved. Gentian properly dried is not as bright in color, but is much better medicinally.

Alcohol and Digestion.—

Petit says that 18 per cent of alcohol conceals the digestive power of pepsin, but that it does not injure it even on long standing. When diluted with water the original activity of the pepsin is restored. The tests were made on a solution of pepsin $6\frac{1}{2}$ years old and containing 18 per cent of alcohol.

"Hard" Drinks vs. "Soft."—

Two German chemists find that the drinking of hard water produces better teeth, and probably stronger bones, than soft water. They also state that potatoes boiled in soft water lose most of their salts, through solution in the water, but in hard water the salts are retained.

Huh?—

E. Dorn has observed the indices of refraction of the ethyl esters of ethoxybenzylaminoalphaethylcinnamic acid and of cholesterol propionate at varying temperatures, and concludes that the first have elongated molecules while the latter are disk-shaped.

Vanity the Mother of Invention.—

A glass mirror has been found in a Roman burying-ground which is believed to be 1700 to 1800 years old. It was probably made to reflect by attaching lead-foil to the glass with a resin, but the lead and resin has now combined, forming a resinate of lead.

Theobromoretically.—

Veley and Waller say that theobromine is 1.8 times as powerful (toxic) as caffeine, and that caffeitanic or tannic acid further reduces the toxicity of caffeine. Caffeine-free coffee showed much less toxic effect than natural coffee.

Negro Chemistry.—

Sunlight is found to be much more active in chemical effects in the tropics than in temperate climates. In some cases it produces chemical changes which do not occur in colder climates.

BOOKS

"CHRIST THE HEALER."

A 24-page pamphlet with the foregoing title has been issued by the Open Court Publishing Co. of Chicago. It brings together some quite remarkable material and some quaint pictures which have been collected by Dr. Edward Kremers, director of the pharmacy course in the University of Wisconsin. Dr. Kremers's researches into the history of pharmacy and allied subjects are well known, and he is preserving a great deal of valuable data which otherwise would be buried and lost. We do not know the price of the present brochure, but we assume that copies will be furnished for something like 25 cents each.

PRACTICAL PHARMACY

Some Interesting Facts about Hydrogen Peroxide.—

The publishers of *Modern Pharmacy* have an interesting editorial in the February issue on the subject of hydrogen peroxide. To quote in part:

"Chemically, hydrogen peroxide is acidulated water in which hydrogen peroxide liquid has been dissolved. Physically the water itself will evaporate just as water always does if given an opportunity, but with our product this evaporation in volume is *not accompanied by an equal reduction in the content of peroxide*. A bottle when left uncorked will lose part of its water, but upon assay will actually be found to have increased its proportion of H_2O_2 and will test above standard.

"One of the rigid requirements to which our product is subjected before it is bottled and placed on the market is an evaporation test carried out on a steam bath at 85° C. for fourteen hours. At the end of this time the volume is again made up to the original measure, and we require that when this is done the preparation shall not have lost to exceed 5 per cent of the peroxide gas originally present. This is a very severe test and we do not find that many peroxides will stand it.

"This proves again, what we have so frequently and so stoutly maintained, that a product carefully made and effectively preserved with a small quantity of acetanilide is astonishingly permanent. But of course all peroxide will decompose in time. It is the rapidity with which this takes place which differentiates the satisfactory from the unsatisfactory product.

"We repeat, however, that the best product will liberate a little oxygen gas. This gas accumulates in the open space at the top of the bottle, exerts some pressure on the cork, and assists the process of evaporation by causing some of the water to ooze out around even a tight cork if the package is placed on its side. In order to lessen this degree of pressure, we are now marketing our pint packages of hydrogen peroxide in 20-ounce bottles; this affords a larger space for the liberated gas, lessens the amount of pressure on the cork, and consequently lessens also the evaporation of the water."

Instances of the Utility of Acacia.—

J. Leon Lascoff, in a paper read before the Brooklyn Pharmaceutical Association on the subject of acacia and its uses in pharmacy, cited several instances where the gum may be used to advantage. He said in part:

"Frequently in practical dispensing I have found the use of acacia necessary to turn out a uniform, homogeneous mixture, and to provide for an equal division of doses, as in the following:

Acid sodium oleate.....	0.1 gramme.
Acid salicylic	0.1 gramme.
Phenolphthalein	0.02 gramme.
Menthol	0.01 gramme.

M. ft. cap. mitte No. xx.

Sig.: One every four hours.

"It is difficult to make a proper mass of this com-

pound, but it may be done as follows: Rub the menthol into a fine powder and mix with the salicylic acid and sodium oleate. As soon as the mass begins to liquefy add a few grains of pulverized acacia and a few drops of water, followed by one drachm of sugar of milk and the phenolphthalein, when a nice, perfect white mass is produced, which may be divided into very small capsules.

Oil of turpentine.....	20 minims.
Pulverized acacia	30 grains.
Compound spirit of lavender.....	1 drachm.
Spirit of chloroform.....	1 drachm.
Castor oil	1 drachm.
Water, sufficient to make.....	2 ounces.

"It will be seen that a satisfactory emulsion cannot be turned out with the amount of acacia prescribed. The best way is to make an emulsion of the castor oil, using at least double the amount of acacia, and add the oil of turpentine and other ingredients.

Camphor	1.0 gramme.
Anisated solution of ammonia.....	3.0 Cc.
Infusion of digitalis.....	180.0 Cc.

M.

"Add a small quantity of acacia to the camphor and add the other ingredients in order."

Impurities in Lime-water.—

Otto Muhlhan, in a paper read before the last annual convention of the Ohio State Pharmaceutical Association, suggested an improvement in the official method of making lime-water. He claimed that the present process of agitating the slaked lime (12 grammes) with 400 Cc. of distilled water and decanting once does not rid the lime completely of the chloride and other soluble impurities present.

He suggested that the lime be thrown on a filter and washed with hot distilled water until all chlorides are washed out; then one may proceed according to the present formula. It were better still to have a purified calcium hydroxide official in the U. S. P., with tests of purity, and then to make the lime-water from this by adding a certain quantity to a certain amount of distilled water and decanting or filtering.

Preserving Glucosidal Drugs.—

At a recent meeting of the Washington branch of the A. Ph. A., Lewis Flemer described a method of preserving plant drugs containing glucosides which he believed was first introduced by Dr. Rusby. This consisted in placing muslin bags containing freshly calcined lime in the container with the drug. His experience with this method has not been altogether satisfactory, and he inquired regarding the nature of the container used abroad. In answer to this inquiry it was pointed out that in Switzerland, where the preservation of drugs over calcined lime was suggested in the Pharmacopœia, it is a common practice to use a tin container with a well-fitting lid and a double bottom. In the double bottom of this container freshly calcined lime is placed and the drug itself put in a bottle not necessarily tightly stoppered, over the lime. This container, it was pointed out, has the double advantage of preserving the drug from light as well as moisture, and would no doubt be practicable and advantageous in connection with drugs like digitalis which are supposed to be readily decomposed.

SERVICE DEPARTMENT

In this new department of the BULLETIN the market wants are indicated of those subscribers who are not able to find what they desire, and who are anxious to be put in touch with sources of supply. In some instances we have brought inquirer and manufacturer together, but in all cases it would pay other manufacturers to follow up the clues here given. We shall be glad to furnish the full name and address of any inquirer to producers or distributors who write us for this information. Readers of the journal on their part are earnestly requested to send us a description of their wants: we are anxious to make this department as valuable as possible to them all.

Glass Signs for the Windows.

49. W. Brothers are anxious to be put in communication with a concern which makes a specialty of manufacturing signs for use on the window-panes. The idea is to have separate letters which can be employed to spell different words or phrases. W. Brothers think these letters are made of glass or composition, and they are used by pasting them on the plate-glass front. The ones in mind are concave gold letters.

Fans Propelled by Gasoline.

50. W. Brothers also write as follows: "Do you know of a firm making fans propelled by gasoline? I am informed that there is a company in Chicago, but I have written them on two or three occasions without getting any replies. If you know where such fans are made and can put me in communication with the factory we should very much appreciate the courtesy."

New Fixtures.

51. M. C. W. is in the market for a complete set of new fixtures for a branch store just established. He wants to be put in touch with all of the leading manufacturers.

Cases.

52. S. S. R. wants to get one or more cases like those used for Humphrey's Specifics, Diamond Dyes, Diola Dyes, the Broncho Homeopathic remedies, etc. He would appreciate it if manufacturers of cases of this kind would write to him and give him quotations and specifications.

Metallic Plates as Silver Cleaners.

53. J. J. D. writes as follows: "I understand that there are aluminum plates now on the market which are used as a safe substitute for potassium cyanide as a cleanser for silverware. This is a new one on me as I have no doubt that it is to a great many others. We cannot afford to remain in ignorance of this information, and we should like to know where these aluminum plates can be purchased."

Metal Caps for Glass Bottles.

54. E. P. Mc. desires finding the manufacturer of the "Phoenix cap" for glass bottles used, among other manufacturers, by the makers of Wright's Silver Cream. Our correspondent would like very much to be put in communication with these people.

An Engine for Motion Window Displays.

55. T. A. S. wants to know about some manufacturer or jobber who has for sale a mechanical engine that would run at least five hours with one winding. This is to be used for operating a motion window display requiring but little power. Our correspondent explains that he has no water or electricity for the purpose, and he thinks dry cells or electric motors are too expensive to use. Something like the ordinary mechanical engine would be the most economical and would do the work if it did not require too much winding.

Machines for Filling Powders.

56. A. S. W. wants to know of reliable firms who manufacture machinery used for the purpose of filling powders, and machines also for the manufacture of pills.

Straw Dispensers for Use at the Soda Counter.

57. The W. Drug Co. writes: "About two years ago we purchased a patent straw case or deliverer. If we mistake not we bought it from some Chicago house, although we believe the article had been patented by a Texan. We are unable to locate the address of the makers, and are unable to find them advertising the affair. It is a glass case with a roller at the bottom that delivers the individual straw as desired. If you are able to place us in communication with the manufacturer we will appreciate it, or should you know the address of the maker we would appreciate your having them send us two of the affairs by express C. O. D. We have found the device a saving in straws, as well as sanitary."

POLICING MEXICO CITY AT NIGHT.—To those who watch with interest the struggles of American municipalities over the police problem, the following statement from the New York *Evening Post* may offer some suggestions. It refers to the police system in the City of Mexico, where it is reported to be thoroughly satisfactory:

Each policeman on night duty starts out with a lighted lantern. He places it in the middle of the street, at the point nearest to the center of his beat where two streets intersect. He is forbidden to move out of sight of the lantern. If one requires the services of a policeman, a glance up or down the street will show the gleam of a lantern. The policeman is always near-by. Encouragement to strict attention to duty is provided by a standing reward of \$5 to any one who will bring a policeman's lantern to a station-house. The officer who loses his lantern is mulcted \$5, and otherwise disciplined to teach him to pay closer attention to business. Each policeman is required to keep a record of the persons living on his beat, and he is held accountable for failure to report a case of illness. Mounted police patrol the outskirts of the city. At brief intervals through the night every policeman sounds a whistle, which must be replied to by the man on the next beat. If no response is forthcoming, the roundsman or another policeman goes to see why the signal is not returned.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Ringworm Applications.

H. G. H. asks us to print formulas of ringworm applications, some for human use and others for cattle.

For the human, the following preparations are suggested. They should be rubbed in well several times a day:

- (1) Iodine2 drachms.
Potassium iodide1 drachm.
Alcohol6 fluidrachms.
Water, to make.....2 fluidounces.
- (2) Precipitated sulphur1 drachm.
Ammoniated mercury1 drachm.
Salicylic acid40 grains.
Wool-fat, hydrous1 ounce av.
Petrolatum1 ounce av.

Unna's compound chrysarobin ointment:

- (3) Chrysarobin160 grains.
Ichthyol100 grains.
Salicylic acid60 grains.
Petrolatum2 ounces av.

Ringworm in cattle usually attacks old, underfed animals where stalls are poorly ventilated and unclean. The stalls must first of all be thoroughly cleaned, aired, and whitewashed with lime, and the affected parts of the animal treated with the following:

Green soap10 ounces av.
Water10 fluidounces.
Pine tar.....5 ounces av.

Heat on a water-bath until of a uniform consistency.

Wash the entire body of the animal every two days with warm green soap solution (1 to 20), rinse with warm water, and when the animal is dry rub the above ointment well in under the hair.

The U. S. Bureau of Animal Industry directs this treatment: Remove all crusts by washing with soap and water, then apply acetic acid, sulphur ointment, tincture of iodine, or citrin ointment once a day. Cleanse the stable and whitewash it to destroy the spores scattered by the crusts.

Carpet Bug Exterminators.

G. L. O. writes: "I have quite a number of calls for something to exterminate carpet bugs. Can you tell me how to get rid of this pest?"

This insect is generally spoken of as the "buffalo moth," "carpet beetle," and "carpet bug."

Tobacco, pepper, camphor, carbolic acid, and oil of turpentine have all been recommended for destroying or driving them off, but none of these remedies seem to be of much avail.

Benzine, kerosene, and good insect powder appear to be the most efficacious substances with which to com-

bat this pest. Carpets which are infested may be soaked in gasoline, which, if of good quality, will leave no odor or stain. When the carpets are taken up it is a good plan to pack all the cracks in the floor with cotton, which should then be saturated with gasoline. When the larvæ are found to be injuring furs or clothes hung in the closet, it would be best to use insect powder.

It is stated that the insects in carpets can be destroyed by laying a wet sheet on top of the carpet and passing hot flat-irons over it. The steam thus produced destroys the grub. In recommending the employment of gasoline the dangerously inflammable nature of the liquid should always be called to the attention of the user and necessary precautions suggested. The late Dr. Riley of the Department of Agriculture recommended this treatment:

Bare as many rooms as possible at house-cleaning time, and, after carefully removing all dust, spray benzine by means of an atomizer into all of the floor cracks and under the baseboards until every crevice has been reached. The carpets, after thorough beating, should be slightly sprayed in the same manner. Benzine quickly evaporates and leaves no odor.

Another method of extermination which has been recommended is fumigation with formaldehyde.

Glue for Paper Pads

R. W. T. wants a preparation for printers' use to glue paper pads. Here are a few:

- (1) Glue3½ ounces.
Glycerin8 ounces.
Water, a sufficient quantity.

Pour upon the glue more than enough water to cover it and let it stand for several hours, then decant the greater portion of the water; apply heat until the glue is dissolved, and add the glycerin. If the mixture is too thick, add more water.

- (2) Glue6 ounces.
Alum30 grains.
Acetic acid.....½ ounce.
Alcohol1½ ounces.
Water6½ ounces.

Mix all but the alcohol, digest on a water-bath till the glue is dissolved, allow to cool, and add the alcohol.

- (3) Glue5 ounces.
Water1 ounce.
Calcium chloride1 ounce.

Dissolve the calcium chloride in the water, add the glue, macerate until it is thoroughly softened, and then apply heat until completely dissolved.

- (4) Glue1 pound.
Glycerin4 ounces.
Glucose syrup.....2 tablespoonfuls.
Tannin1-10 ounce.

Use when warm and allow the glue an hour to dry and set on the pads. This can be colored with any aniline dye.

"Beer Seed." What is It?

W. R. M. is looking for the recipe of a beverage that we do not know how to make. He says: "Since I was a boy 65 years ago I have known of a substance resembling tapioca, called 'beer seed.' It is used by the country people of my acquaintance to make a summer drink which affords a substitute for milk. The beer is made by putting a few spoonfuls of the 'seed' in a gallon or so of sweetened water. After a few hours fermentation sets in and the 'seed' increases in number. What is this 'beer seed' and where does it come from?"

This is something of a sticker. The seed to which



PHARMACY STUDENTS CELEBRATE.—The 21st anniversary of the Washington State University was observed with proper ceremony by the students and faculty. Members of the Pharmacy Department took a prominent part in the parade, as may be seen from the accompanying half-tone. One-fifth of all the graduates from the Washington institution are from the Pharmacy Department.

you refer may possibly be kefir grains. They are described in the dispensaries, but are not used much in this country. Or perhaps the seeds are a dry yeast. We are told of a Russian beverage called quas. It is made by planting the crust of rye bread in water presumably sweetened, as alcohol develops later. Fermentation sets in. The bread floats on top of the water for a few days, but later becomes laden with a fungus and then settles to the bottom. The supernatant liquid is used as a beverage.

Distemper Remedies.

P. P.—We do not know the composition of the proprietary distemper cure which you mention.

The following remedies have been suggested, but we hesitate to offer them. The services of a trained veterinarian are usually necessary to treat this variable and trying disease:

DISTEMPER POWDER.

Potassium nitrate	4 drachms.
Black antimony	2 drachms.
Sulphur	1 drachm.
Fennel, powdered	1 drachm.

Mix. From 10 to 30 grains of this mixture is sufficient for a dose.

DISTEMPER PILLS.

Antimonial powder	2½ grains.
Mercury, with chalk	2 grains.
Dover's powder	3 grains.
Quinine sulphate	1½ grains.
Extract of nux vomica	½ grain.

Make into one pill, one such to be given twice or three times a week.

The Prospects for a Deaf Clerk.

A drug clerk submits a rather pointed query. He asks: "What are the prospects of a drug clerk who is slightly deaf? My hearing is not so very bad, but it is somewhat unpleasant behind the counter at times. Would it hinder me getting a job as prescription clerk? Are prescription clerks in demand and what salary do they command?"

Slight deafness would be a handicap in a large city where people are in a hurry and want quick service. But in a small town, in a place of not over 10,000 inhabitants, your chances are very fair. Be neat, be courteous, work hard, and seek to make your good qualities compensate for any inconvenience that your

impaired hearing may cause. There are any number of men practicing pharmacy successfully who have the very infirmity you mention, and they not only compound prescriptions but wait on trade also.

Prescription clerks are in demand. They earn from 50 to 75 dollars a month.

Restoring Formaldehyde Solution.

S. J. & G. have been having trouble with their formaldehyde solution. They write: "When a solution of formaldehyde becomes cloudy and milky, quite a little white substance is formed, which, we understand, is paraformaldehyde. What can be done to restore its former condition? Is the remaining liquid when separated from the white solid matter of any strength as formaldehyde solution?"

We suggest warming the solution in a bottle that is loosely stoppered for several hours or until the precipitate goes into solution. To filter out the solid paraformaldehyde would weaken the solution.

Overcoming a Dispensing Difficulty.

C. B. asks: "What is the best way to compound one ounce each of stronger water of ammonia, tincture of iodine, and collodion? Is there any way of preparing this mixture so as to get a decent looking result immediately?"

Spirit of ammonia must be used in place of water of ammonia. A 28-per-cent spirit of ammonia would have to be specially prepared. Water of ammonia will not mix with collodion.

Remedies for "Chiggers."

E. D. H. wants a preparation for the treatment of screw-worm bites.

In previous issues we have suggested chloroform and also an ointment of menthol and methyl salicylate in a lanolin base. We understand that it is a common practice to first remove the insects mechanically by squeezing them out. Then the remedies are applied. L. H. Howard says that a saturated solution of sodium hyposulphite applied to a chigger bite will instantly relieve the itching.



PHARMACY STUDENTS CELEBRATE.—This was a gala event for the students, as may be seen from the accompanying reproduction of a photograph taken while the parade was in progress. Professor Watt, head of the Department of Pharmacy, permitted his automobile to be used for the occasion.

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THE MONTH'S HISTORY

FOOD AND DRUGS ACT VS. REMEDIAL CLAIMS.

The Department of Agriculture in general and Dr. Wiley in particular, have been defeated recently in a considerable number of cases which practically amounted to tests of debatable rules and regulations. From the very first the government has declared, for instance, that the misbranding clause of the food and drugs act affected therapeutic or remedial claims as well as statements regarding the identity and content of ingredients. Scores of patent medicine manufacturers, believing that the government was correct, struck the word "cure" out of the titles of their products, and many changes were made also in the language on the label regarding remedial properties.

As we reported briefly last month, however,

the Supreme Court of the United States, handing down a judgment in the Johnson cancer cure case, held that by no possible construction could the food and drugs act be stretched to touch at all upon the question of therapeutic properties. Justice Holmes, who wrote the decision, analyzed the act with some care and declared that Congress certainly had no intention of applying the words "false and misleading" to the curative claims that might be made for products. As our readers know, we have also reported upon similar decisions from at least three of the Federal Circuit Courts. The last case of the kind was that brought against the American Druggists' Syndicate with reference to its Peroxide Cream.

It will be recalled that some months ago Dr. Wiley expressed the strong conviction that not only did the food and drugs act outlaw exaggerated therapeutic claims made in the title or on the package of products, but also outlawed similar claims made in the newspaper or other advertising of these articles. His technical point was, we believe, that the advertisement was constructively a part of the label, and as such was brought under the jurisdiction of the law. A conference was held in Washington at which this idea was advocated, and it was generally believed that if the government won the cases then pending it would proceed to act on this broader view of the law's application. The recent Supreme Court decision has put a stop to all that, and will compel the government in the future to limit itself to cases of plain adulteration or where false and misleading statements are made regarding the character of products from a pharmaceutical or chemical standpoint.

In the meantime, however, President Taft has sent a strong message to Congress recommending that the food and drugs act be so amended right away as to include remedial claims within its jurisdiction, and if this is done the government will for the first time have legal warrant for its prosecutions in this direction.

OTHER GOVERNMENT DEFEATS.

Another contention which the government has made from the first is this, that a product could not be given the name of one of the ingredients in it unless that ingredient were in the majority, so to speak, or at least present in sufficient strength to make it the preponderating element. This point was also raised in the Peroxide Cream case, and again was the contention of the government defeated. The Federal Circuit Court held, as we reported last month, that while there was very little, if any, peroxide present in this cream, no claim of any particular amount was made, no misbranding was therefore perpetrated, and since peroxide was not one of the substances mentioned in the act it wasn't necessary anyway to give its actual content. It of course remains to be seen whether this particular interpretation will be supported by the higher court. A similar point was at issue in the Coca-Cola case, and the Circuit Court also held in that instance that the title was not misleading, and that the product contained enough of the suggested ingredients to justify the use of the name.

Still another contention made by the government has been that when one of the listed chemicals, acetphenetidine, for instance, is contained in a product, the name of the substance must not only be printed on the label in the customary manner, but there must also be a statement that it is a derivative of acetanilide. This point was contested by the Anti-kamnia Chemical Co. The latter has won its case in both the lower court and the Court of Appeals of the District of Columbia. Both courts have held that it is enough to mention the particular drug on the label, and that there is nothing in the law to compel any statement of the source from which the drug is derived.

* * *

CLEARING THE ATMOSPHERE.

One or two other positions taken by the government officials have likewise been rejected by the courts, but after all this is only what students of jurisprudence have been predicting ever since 1906. They have declared time and again that the Board of Food and Drug Inspection in Washington had devised, and was taking measures to enforce, regulations which were legislative in character, and which sought to read into the law things not

already there. Many of the officials of different States have similarly published regulations not warranted by the laws upon which they are based, and it is very gratifying that recent court decisions, soon to be supplemented by others in cases now pending here and there, will clarify the atmosphere and will teach the drug trade just what it may expect from the food and drug laws.

If these laws are not comprehensive enough the thing to do is to amend and supplement them. What we must have is *statutory* laws—not laws made by executive officials. If we countenance the latter, we shall never know where we are at, and any official will find it possible to harass industry to an enormous and embarrassing extent.

* * *

REGARDING PROFITS.

At the meeting in Battle Creek last month of the Michigan State Pharmaceutical Association (reported upon elsewhere in the present issue of the BULLETIN) a very animated discussion arose over a paper entitled "The Druggist and His Profits." Charles F. Mann, with a characteristic touch of Dutch straightforwardness, expressed vigorous impatience with the frequent statement made by writers on this subject, that patent medicines are often sold at a loss, and that certain other things in the store do not yield an adequate profit. His point was that it costs a good deal less to sell these things than it does, for instance, to dispense prescriptions, that for this reason it pays to handle them, and that it is all wrong to lead druggists into believing that such profits were too small and that the goods ought consequently to be thrown out of stock.

The obvious answer to this charge, of course, is that no one of experience ever urges druggists to abandon patent medicines even if they do yield too small a profit. These things have to be carried in stock, regardless of what profit they yield; and, furthermore, if they are abandoned, and nothing put in their place, the total sales drop and the percentage of expense correspondingly advances. The only object that writers have in calling attention to the close margin under which a good many things are sold in drug stores is to make pharmacists aware of the facts so that they can boost up profits on other lines and thus make the general average of profit show up satisfactorily.

F. E. Bogart pointed out that an astonishing percentage of the druggist's business was in proprietary articles of all kinds—patent medicines, soaps, special-brand sundries, and the like. Different speakers placed this percentage anywhere between 25 and 50 per cent, according to their locations. If, then, the druggist is selling this large amount of material at a very low yield, it is of vital importance that he know it—and know exactly and accurately just what this yield is. This will stimulate him to enlarge his profits here and there where opportunity presents and thus bring up the general average of profit throughout the whole business. It is this general average of profit, spread over a year's business, which determines whether a druggist is making enough money or not, and that druggist will never have the figures high enough who doesn't thoroughly realize what little, if any, margin is yielded him on a lot of things that he is compelled to carry in stock.

* * *

THE PERCENTAGE OF EXPENSE.

A discussion of much the same character arose last month at the meeting of the Nebraska State Pharmaceutical Association. The editor of the BULLETIN, who happened to be the guest of the association, read a paper entitled "Are You Making Enough Money?" The paper was founded on the assumption that most druggists did not know what their profits actually were; that ignorance of the real facts led them unconsciously to sell a good many things unprofitably; and that once they realized the exact condition of their business they would be in position to correct the situation. A system of records was suggested by means of which the facts regarding one's business and his exact profits could be easily determined.

Charles R. Sherman, like Mr. Mann, made the point that a lot of things have to be sold in the drug store which do not yield the average percentage of expense, but he argued that for the most part these things are really sold at a low cost and that the general percentage expense of the whole business does not properly apply to them. Thus proprietary articles or full boxes of cigars, for instance, can be handed over the counter quickly, and the sale closed with very little time or labor involved.

In department stores, where each depart-

ment is separately considered and given its own percentage of cost, the expense figures are of course found to vary greatly, but the small druggist cannot pursue detailed methods of this kind, and the most he can do is to see to it that his business as a whole yields him a gross profit considerably beyond his average expense of selling goods. If some things have to be sold at a close margin, well and good, but let him see to it that other things yield a big enough profit so that the general figures are brought up to a sufficiently high average.

* * *

THE NEW MILES CONTRACT.

Secretary Fernald of the Miles Medical Co. was present at the Michigan meeting and gave the members a short talk on the new Miles contract. In a word, the new agreement seeks to make the retailer the actual instead of merely nominal agent of the manufacturer, and to have the title of the goods remain with the manufacturer until they are sold. This device is based upon the minority decision of Justice Holmes in the Miles-Park case, and Mr. Fernald was very hopeful that it would prove valid if submitted to the test of court construction.

He argued that the Sherman law, as interpreted by the Supreme Court in the Standard Oil and Tobacco trust cases, leaves it to the courts to determine whether a given restraint of trade is reasonable or unreasonable, and that at the present time no one can really tell in any particular case just what decision will be rendered. He thought there was certainly no presumption against the success of the new Miles contract, and that Justice Holmes had pointed the way toward a valid method of protecting prices.

In the meantime the new contracts have been mailed to druggists by the Miles Medical Co., and everybody is congratulating the proprietors on their determination and on their loyalty to the drug trade.

* * *

MORE "CO-OPERATION."

Some little interest has been aroused by the formation of the "United Stores Association" in New York. Readers of coöperative literature would see at once upon reading the prospectus of this organization that the scheme is based upon several successful co-

operative enterprises in Great Britain, notably that of Rochdale. All sorts of retail stores are to be included in the plan, and it is reported that over 100 druggists in New York City have been approached.

The retail dealers who join the movement, however, will not be permitted to buy stock, but will simply be provided with a license costing them \$12.00. In return for the alleged benefits accruing to them, they will pay into the treasury of the Association a percentage on their total sales amounting to about 9 per cent on an average. Of this 9 per cent the company will pay 6 per cent to the consumers in the form of dividends on purchases, $1\frac{1}{2}$ per cent for advertising purposes, while the remaining $1\frac{1}{2}$ per cent will be utilized for the payment of the operating expenses and profit on the investment. This profit, be it understood, will go to the promoters of, and the stockholders in, the company, and these persons are neither the retail dealers nor the consumers, unlike the system followed with coöperative organizations of this character in Great Britain.

It remains to be seen whether druggists and other retailers will see enough in this scheme to warrant them going into it. It seems to resolve itself into the question of whether enough additional trade will be secured to justify the granting of an average discount of nine per cent on the sales. The BULLETIN OF PHARMACY has proved on many an occasion that the druggist's average net profit is only 10 per cent. Where, then, will he come in if he gives nine-tenths of this away?

* * *

DRASTIC ANTI-NARCOTIC REFORMS.

An act is now before the House of Commons of the Parliament of the Dominion of Canada which seeks to place drastic restrictions around the sale of morphine, cocaine, and their salts and compounds. Any druggist who gives, sells or furnishes the prescribed drugs to any person other than a duly authorized purchaser shall be liable upon summary conviction to a fine of \$200 and costs, or imprisonment for three months, or both. The sale is to be limited to physicians' prescriptions, and it is provided also that any physician who writes a prescription illegitimately for a narcotic will subject himself to the same penalties. Furthermore, any person who is

found in possession of any of the proscribed drugs, unless he happens to be one having a right to handle them, is punishable to the extent of \$500 or a year's imprisonment in jail. The same punishment will be meted out to those who seek to import the drug unless they have a right under the law so to do.

These are very severe prohibitions, but the Canadian officials have found them necessary. The usual laws merely restricting the sales to physicians' prescriptions and providing insufficient punishment, do not seem to have proved very effective. As to the prohibition upon physicians, it is interesting to note that in Philadelphia a doctor is under prosecution by the State Board of Pharmacy for having furnished prescriptions to "coke" fiends in the tenderloin district. Similar evidence has also been secured against several physicians in Pittsburg, and suits will soon be brought against them, if indeed this action has not already been taken.

* * *

THE LIQUOR PERIL IN INDIANA.

Governor Marshall of Indiana has interested himself in the violation of the liquor laws by druggists. The Governor has asked the State Board of Pharmacy to go so far even as to revoke the licenses of such druggists. He believes that money collected by the board could be spent in such prosecutions, but the attorney-general holds, on the contrary, that the funds of the board can be used only for enforcing the pharmacy and anti-narcotic laws, and that the enforcement of the liquor laws does not come under the jurisdiction of the Pharmacy Board.

It would appear that a number of "blind tigers" have been established throughout the State under the protecting cloak of pharmacy. Secretary W. H. Fogas, of the Board of Pharmacy, is on record as declaring that former saloonkeepers, denied the right of continuing their business as such, are following the method of opening fake drug stores, employing a registered man for the front of the store, and doing a thriving liquor business in the rear. In some instances this form of competition has mistakenly caused regular druggists in self-defense to sell more liquor, and thus conditions have become quite grave in certain parts of the State.

It remains to be seen just what the Board

of Pharmacy will do, or will find that it has power to do, but it is certainly to be hoped by every lover of the profession that the situation will be grappled with most earnestly.

* * *

A SCHEME THAT DIDN'T WORK.

Two young men have recently come to grief who sought to play a smart trick on the Kentucky Board of Pharmacy. A wanted to be registered, but he didn't think he could pass the examination, so he enlisted the services of B, who happened to be a licentiate of the Ohio Board, and who was presumably a pretty good student. B came before the Kentucky Board, registered in the name of A, and successfully passed the examination. In due time the certificate was issued and mailed to A, and A for the time being flattered himself that he had put one over on the Board and that he had become a registered pharmacist with very little trouble.

But his pipe dream was of short duration. The Board got next to the situation, put its attorney on the trail, and suit was at once brought against both culprits. There was nothing for them to do but to plead guilty, and both the principal and the "phony" were each fined \$100. They are now sadder but wiser men!

This sort of thing is occasionally attempted but almost invariably results in conviction and punishment. Some years ago the Pennsylvania Board unearthed several schemers of this sort. As the result of its recent experience, the Kentucky Board has now adopted what it calls "the county referee and photograph plan of identification" for all applicants.

* * *

USING UNREGISTERED CLERKS.

The organization of drug clerks known as the National Association of Pharmacologists, with headquarters in Columbus, Ohio, has become quite active in the enforcement of pharmacy laws regarding the employment of unregistered clerks. Largely through the instrumentality of the association, indeed, the Ohio act has recently been amended to read that a registered pharmacist must be "in full and actual charge of every store." This apparently leaves it to the courts to determine just how long the registered proprietor or manager may leave the store in temporary charge of the unregistered assist-

ant. A bill with a similar purpose was introduced in the Massachusetts legislature last winter, but aroused such opposition that it was killed. If we remember correctly, that bill would have compelled a registered man to be in attendance upon the store at all times, and it was fathered and supported by the pharmacy board. The National Association of Pharmacologists announces that it has deputed one of its members to travel through the State on the lookout for violations.

* * *

PRICE-CONTRACTS IN CANADA.

The decision of the United States Supreme Court in the Miles case, which all but did away with contract plans in the United States, has not seemed to cause any worry over in Canada. From an editorial in a recent issue of the *Canadian Pharmaceutical Journal* we learn that both the Canadian and the British courts have uniformly taken a different view regarding the right of the owner of a proprietary article to control the prices under which it may be sold.

Several decisions are on record to the effect that a condition printed on the invoice would hold good if the purchases were accepted with a knowledge of this condition. In other instances direct contracts have been supported, and injunctions have been granted where the contracts have been violated. More than this, at least one judge has ruled that retailers might combine and demand of manufacturers that they maintain their retail selling prices rigidly.

* * *

DR. GREGORY "WATCHED."

The twenty-fifth annual banquet of the Alumni Association of the Buffalo College of Pharmacy was held last month, and one of the interesting features of the occasion was the presentation by the Alumni Association of a solid gold watch to Dean Willis G. Gregory. It is always exceedingly gratifying when the present and former students of our colleges of pharmacy testify to their appreciation of the men who have presided over their institutions.

* * *

Oscar Oldberg, who recently retired from the deanship of the Northwestern School of Pharmacy after 25 years of service, has had conferred upon him the honorary degree of Doctor of Laws by Northwestern University.

EDITORIAL

THE NEED OF A FEDERAL ANTI-NARCOTIC LAW.

We now have fairly effective anti-cocaine and anti-narcotic statutes in the different States. In some instances they are not very well enforced, but the laws are there for purposes of reform whenever public or pharmaceutical sentiment develops in sufficient measure. Unfortunately, however, the efficacy of these State acts is very greatly diminished along the State borders, for in such places drug habitués, denied "dope" in their own town, find it easy to cross over into a near-by city in another State and get their supplies. Some unscrupulous druggists even go so far as to pander to this class of custom, and in quite numerous instances a profitable mail-order business is conducted.

The need is therefore apparent for a Federal anti-narcotic law which will stop up these leaks—which will effectively prevent the interstate traffic in narcotics. Illuminating proof of the necessity for such a measure is found in the last annual report of the Kentucky Board of Pharmacy. This Board, as we have mentioned in the BULLETIN on several occasions, has done excellent work in the eradication of the cocaine evil. In trying to correct the situation in Louisville, however, the Board found that its efforts were practically hopeless for the reason that fiends could get their drugs right across the Ohio River in New Albany, Ind. Nothing daunted, the Board straightway opened negotiations with the Indiana authorities in an effort to put a stop to the conditions.

The prosecuting attorney in New Albany was first appealed to. He expressed his willingness to be of help but declared that there were no funds for the employment of detectives and other assistants. The Kentucky Board promptly sent over the helpers who had been so efficient in securing evidence in Kentucky, and proof was soon secured of the illegitimate sale of cocaine. The evidence was placed before the prosecuting attorney, but on one pretext and another he excused himself for failing to begin prosecutions. Governor Marshall was even appealed to by the Kentucky Board, and correspondence was conducted with him for some time. He declared that he was very anxious to do whatever the

situation might demand, but nevertheless, for one reason and another, nothing at all was effected in the way of practical results, and the Kentucky Board in the end found itself helpless.

An efficient interstate law would step in when emergencies of this sort arose, and prevent the practical annulment of State laws under such circumstances.

TWO REASONS (?) WHY THE GRADUATION PREREQUISITE SHOULD NOT OBTAIN.

The *Western Druggist* has always been bitter in its opposition to the graduation prerequisite—so bitter, indeed, that its attitude has suggested more the biased partisanship of politics than the judicial discussion of a debatable subject. In a somewhat milder and more impersonal article than usual, it recently summed up its position in the following language:

The advocates of prerequisite legislation proceed on the assumption that the colleges have a monopoly of the work of education and without a college course no man can acquire competency in the art of dispensing. The professional standing of thousands of non-graduates of the past and of the present is proof of the fallacy of this assumption, but even conceding that it be warranted in a majority of cases, the exceptions today are sufficiently numerous to make the incorporation of such assumptions in State legislation a grave injustice. Moreover, these two considerations are a governing force:

First, any man desiring to enter the practice of pharmacy has a constitutional right, if qualified, to demonstrate his qualification before a board of pharmacy and to have those qualifications made effective by the receipt of a certificate of registration conferring the right to practice. Pharmacy laws are not made for pharmacists or for colleges, but for the protection of the public against incompetency in dispensing medicines. To the extent therefore that such competency is insured the public is protected and no pharmacy act can constitutionally go farther.

So? What about the constitutionality of medical, veterinary, and dental laws making graduation compulsory?

Second, prerequisite legislation means the subordination of the Boards of Pharmacy to those colleges which under such legislation may dictate to the boards whom they may or may not accord the privilege of an examination. In other words, private institutions are given power over the representatives of the people on the Boards of Pharmacy, thus surrendering the public interest to private interest—a perversion of legislation not to be tolerated in a free country.

On the contrary, the college will have less authority and the board more, for the board, as a part of the executive machinery of the

State, will have power to demand that the college conform to the requirements, and the college will have to come up to the scratch or go unrecognized. The boards will hold the whip hand—not the colleges.

Our Chicago friend will have to produce better arguments than these if he expects to kill the prerequisite movement.

"PEOPLE WON'T CROSS A STREET."

Some surprise was exhibited when the new Riker-Hegeman combination in New York established a store on the opposite corner within half a block of the big Hegeman pharmacy at 200 Broadway. To the average man this looked like competing with oneself. The incident is used as the text of a very interesting article by Thomas E. Dockrell in a recent issue of *Advertising and Selling*. Mr. Dockrell points out that shrewd merchants have long since made the discovery, and have established it as a law of human nature, that in large cities people will not cross a street to buy goods. In the hustle and bustle of the modern era time is too valuable!

This principle of course applies more particularly to men. It is fair to presume that women are natural shoppers and would rather put themselves out than not. But in stores which cater exclusively to men, like the United Cigar Stores, for instance, it has been found necessary in crowded districts, where the traffic is enormous, to have shops directly across the street from each other, and sometimes even on opposite corners. It was this law of human nature—or at least of masculine nature—that dominated the establishment of a second Riker-Hegeman store so near the big one at 200 Broadway, and apparently the new place has built up its own trade successfully without taking any business at all from the other one.

INSURANCE CARELESSNESS.

On several occasions recently we have pointed out the folly exhibited by many druggists in failing to protect themselves fully against fire. It is probably rare for a pharmacist to have no insurance at all, but it is quite customary to have too little. Here are three letters received within two or three days of each other by a large house from creditors who had suffered fire losses:

GENTLEMEN:—Yours received and I note what you say. Just returned on June 6 and found my store in ashes. It was burned on the night of the 5th, and I had no insurance. Everything a clear loss—something like \$5000. Am in this world without a dollar, and will ask you to bear with me for a while. I will pay this bill, but will have to have a little time. As to what I will do I cannot say. I haven't anything to do with. Hoping this will be satisfactory with you, I am, yours respectfully.

GENTLEMEN:—I am very sorry to inform you that my store was completely destroyed by fire about 5 o'clock Tuesday morning. I have \$3,500 insurance, but will lose as much as \$2,500. I will have to ask you to wait for what I owe you until I can get my insurance adjusted, but I assure you I will pay you every dollar with interest. If you can grant me this favor, I will certainly appreciate your accommodation.

Yours respectfully.

GENTLEMEN:—In regard to the note you hold against us for \$100 due on the 3d, will it be convenient for you to carry this a few months longer, charging us interest on it?

You are probably aware of the fact that we have suffered a severe fire loss and have not yet gotten back in business again. We have been at considerable expense fitting up our new place and right at present need all the funds we have on hand, hence will consider it quite a favor if you will hold the note over awhile.

Awaiting your favors, we are,

Yours very truly.

These letters tell their own story without necessitating any comment. In no case was there enough protection, and in one case there was none at all. In all three instances the druggists were subjected to a good deal of sacrifice, and, what is equally important, they had to hold up their creditors for an indefinite length of time.

GOT ANY GOOD SHOW CARDS?

One of our most interested readers makes the point that we have not published enough material in the BULLETIN on the subject of card writing, and his criticism is doubtless correct. We have had occasional articles on the subject, and some of them have gone into detail and have been quite elaborate. But after all we have not begun to exhaust the topic, and we should like very much to get specimen show cards from our readers for reproduction in the journal. By this method one druggist can see what other druggists are doing, and we can carry out our purpose more effectively of making the BULLETIN a real medium of exchange between our readers. Send along show cards and signs of which you are particularly proud!

THE HALL OF FAME

PROFESSOR COBLENTZ IN THE LIME-LIGHT.

We are showing this month a new portrait of Professor Virgil Coblentz of New York City. Professor Coblentz has figured very strongly of late by reason of the attacks made



VIRGIL COBLENTZ.

by the *New York World* upon many of the druggists of that city. The drugs collected by the *World* were turned over to Professor Coblentz for examination and the analyses were made by him or by others whom he asked to cooperate with him.

FORTY-THREE YEARS IN HARNESS.

E. B. Heimstreet of Palmyra, Wis., has had a long and active career in pharmacy—a career lasting over forty-three years. Most of this period was spent in Janesville, Wis., but desiring to return to the simple life Mr. Heimstreet two or three years ago moved to the small town of Palmyra, a beautiful village near Milwaukee, where he established himself in a very neat store. He avers that the next twenty years of his life are very largely to be years of pleasure, in which fishing, boating

and the raising of pets will figure conspicuously.

Back a generation ago he was the prime mover in organizing the Rock County Pharmaceutical Association, and he was secretary until he left Janesville. It was he, too, who issued the call that resulted in the formation of the Wisconsin Pharmaceutical Association in 1880, and he has been secretary ever since except for a period of about five years when he thought he would let somebody else do the work. Long a member of the State Board of Pharmacy, he was secretary also of this body for upwards of twenty years. He was instrumental in the enactment of the State phar-



E. B. HEIMSTREET.

macy law. Much interested in the subject of cooperative druggists' insurance, he is a director of the American Druggists' Fire Insurance Co., and has charge of the Wisconsin interests of this organization. Of the Wisconsin Pharmacal Manufacturing Co. Mr. Heimstreet is, and from the first has been, the secretary; and from first to last he seems to have been one of the central figures in every movement affecting the interests of the pharmacists of Wisconsin.

ONE BACHELOR WHO KNOWS HOW TO BE COMFORTABLE.

When we decided to print in the *BULLETIN* a series of pictures illustrating the residences of well-known druggists, we asked E. H. Ladish for a photograph of his home, not knowing at the time that he had never entered into the matrimonial state. Nevertheless we got the picture, and we found at least one bachelor who in the absence of a wife knew how to provide comfort for himself. In mail-

ing the photograph, however, Mr. Ladish was very anxious that we should not arrive at false conclusions, and he went out of his way to explain that the children shown in front of the house belonged to the man in a neighboring apartment. He went on to say that



E. H. LADISH.

his own family comprised "my housekeeper, my dog Skipper, two canary birds, and Jim the alligator."

Mr. Ladish's apartment is on the first floor of the first building shown in the series of "brown stone fronts." The library is the



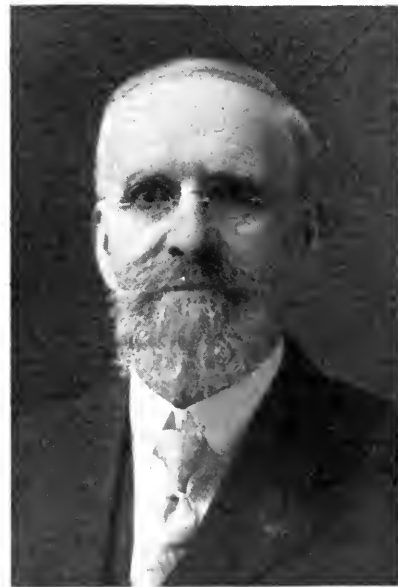
Mr. Ladish's apartment is in the first building.

room indicated by the bay window on the side. After this published description of Mr. Ladish's home comforts it is possible that he may be besieged with matrimonial applications, but we vigorously protest that we had no such object in mind in printing this article.

We may say, however, that Mr. Ladish, though he has sold his prosperous drug store in Chicago, is financially interested in a number of other enterprises. He was for two or three years a member of the Executive Committee of the N. A. R. D. His opinions are always sound, and it is for this reason that we are reprinting what he said recently about the BULLETIN OF PHARMACY: "You are making a very attractive monthly of your paper. Always something new. Well, what's the use of having plenty of gray matter and not turning it to good account?"

ONE OF THE PIONEERS.

If we mistake not, the first one of the co-operative insurance companies to be organized in pharmacy was the Retail Druggists' Mutual Fire Insurance Co. of Ohio, with headquarters



JOHN WEYER.

in Cincinnati. The success of this organization paved the way for others which have since followed from time to time. We are presenting this month a portrait of Mr. John Weyer, of Cincinnati, the secretary and general manager of the company, and the man who, more than anybody else, is responsible for its success. Incidentally it is worthy of note in this connection that Mr. Weyer was a member of the first board of pharmacy appointed in the State of Ohio. He served from 1884 to 1895. At the present time he is 73 years old.



William B. Day, Chicago, secretary Illinois Pharmaceutical Association.



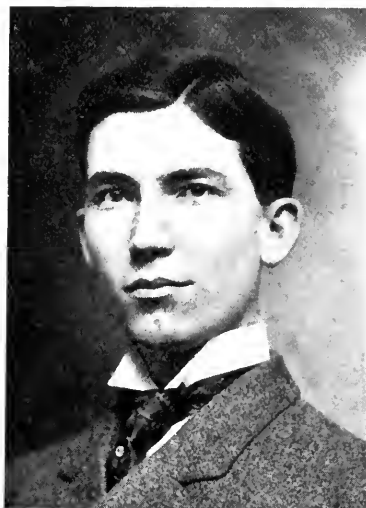
J. W. Gayle, Frankfort, secretary Kentucky Pharmaceutical Association.



Clarence Bowmer, Providence, secretary Rhode Island Pharmaceutical Associ'n.



Robert Lowman, Pittsburg, secretary Kansas Pharmaceutical Association.



E. F. Kelly, Baltimore, secretary Maryland Pharmaceutical Association.



J. W. McArthur, Spokane, secretary Washington Pharmaceutical Association.



G. O. Young, Buckhannon, secretary West Virginia Pharmaceutical Association.



E. C. Bent, Dell Rapids, secretary South Dakota Pharmaceutical Association.



Herbert E. Rice, Nashua, secretary New Hampshire Pharmaceutical Association.

Secretaries of some of the State Pharmaceutical Associations—The Men Who do the Work!



This is the store of the William Haughn Drug Co. in Casey, Ill. Mr. Haughn himself is standing behind the counter at the right, while his partner, Mr. Chenoweth, is behind the counter on the left side of the store.



J. P. Eckers, at the corner of 27th and Prospect Streets, Kansas City, Mo., has a successful business. Witness the attention paid to soda customers—*i.e.*, the tables down through the entire center of the salesroom.



The stores in Central and South America are quite interesting. Here is one located in Santa Ana, Salvador. The proprietor is Federico Vides.



C. E. Robertson is proprietor of the "Blue Front Pharmacy" in Carthage, Ill. The town has 3000 inhabitants and Mr. Robertson does a hustling business.



This is the store in Alexandria, La., of John F. Conrad, Ph.C., who is seen standing at the left, and who is an alumnus of the School of Pharmacy of the University of Michigan. Mr. Conrad does a fine prescription business.



L. W. Randolph is the proprietor of this store in Plainfield, N. J. The place was evidently decorated on the Fourth of July or some other patriotic occasion. P. A. Minton, a frequent BULLETIN contributor, is chief prescriptionist in this store.



The exteriors of the pharmacies in South America are quite different from those in this country. Witness this view of the "International Drug Store" in Santiago, Chile, owned by Curt Carliczek.



The interior of the Chilean store shown across the column is equally interesting and suggests a large trade and a high class of patronage. The atmosphere is quite professional in character.



Francisco Javier Cajiao is the proprietor of a pharmacy in Bogotá, Colombia, and the young man himself is shown at the left of the present picture. He is a physician and surgeon as well as a pharmacist, and is well known throughout Colombia.



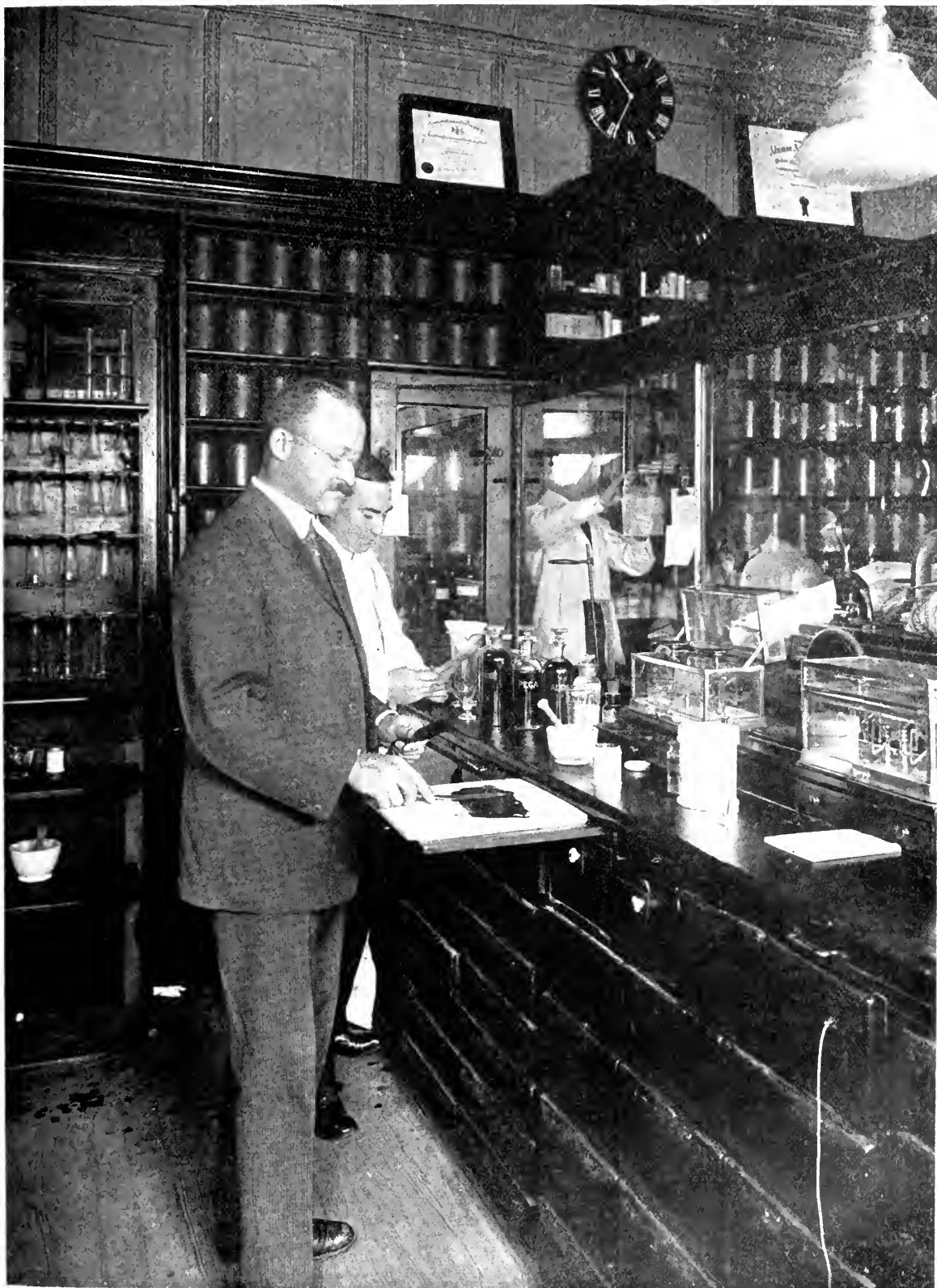
This is another view of Dr. Cajiao's pharmacy, in which the monthly sales amount to something like \$3000. The products of the pharmacy have been awarded a prize at one of the national expositions, and there are several branches of the establishment.



Here we have an interior view of the "Corner Drug Store" of E. W. Austin, which is located in the town of Midland, Mich. Mr. Austin himself is presumably the gentleman standing at the right of the picture.



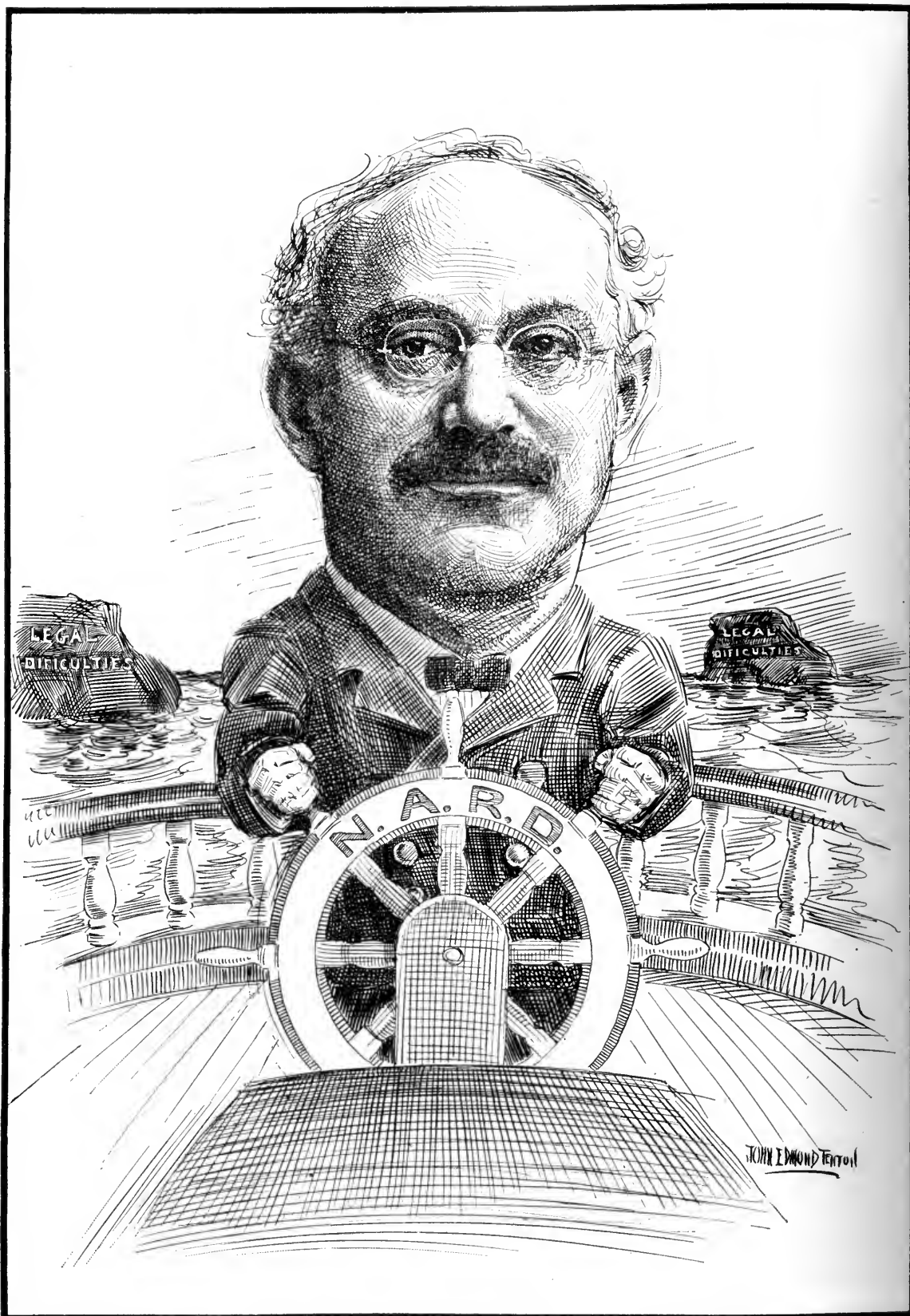
This beautiful and unique pharmacy was established in the Hotel Astor in New York City some time ago by Frederick K. James. We had more or less to say about the store in the April BULLETIN.



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

5. Henry C. Blair, Philadelphia, Pa.



Joseph W. Errant,

Who, as attorney for the N. A. R. D. throughout its entire existence, has successfully steered the organization over many shoals and clear of numerous breakers.

"How I Spent My Vacation."

This is the second installment of travelogues that have appeared in the BULLETIN. Our readers will be all the more interested in these narratives because they tell of the real vacation experiences of pharmacists. Every summer any number of druggists are in the habit of leaving the store for a tour to the seashore, the woods, or the mountains, and these articles will give our readers some idea of the scenery and life that the travelers observe. One writer describes a trip to Kentucky. Another carries the reader into a wild and rugged section of Canada. A third traveler briefly tells of his sojourn on the gulf coast. We present these vacation stories in the hope that they will stimulate other druggists to take annual outings.

A TRIP INTO KENTUCKY.

BY W. S. WHITELEY, VERONA, PA.

A couple of years ago I whiled away the long winter evenings back of the prescription case reading the life of Daniel Boone, a rather juvenile edition at that. But I derived a lot of pleasure from it and subsequently profit, as this narrative will show.

In the course of my reading I ran across a paragraph depicting the merits of a famous spring at Harrodsburg, Ky. I had always been interested in the magic name, Kentucky, and here was my opportunity to visit that country on my next vacation, making the springs my objective point. The book was read and laid aside, but not the plan of travel, which was stored away in one corner of my brain till I could get away.

THE START.

That time came about the middle of July, and I boarded a train for Cincinnati, where I arrived the following morning. I had just time enough to breakfast in the dining-room of the station before taking the train which crosses the river into Kentucky. Thence I traveled through the beautiful blue-grass region dotted with its fine farms and cattle on a thousand hills, over High Bridge and on to Danville, where I arrived about noon. I visited many points of interest in Danville that afternoon. It is one of the oldest cities and the first capital of the State. The first surgical operation known as ovariectomy was performed in this city. The State university was located there, situated in a beautiful place, and many fine streets and grounds were to be

seen. Here I changed my programme somewhat, as I was told that Crab Orchard Springs was the Mecca of most pilgrims to Kentucky. I therefore deferred my visit to Harrodsburg till my return. The next morning I started for Crab Orchard, being driven to the junction by a gentleman who was going that way and offered to take me in his rig.

I reached that village at about noon and found the hotel to be about a mile from the springs. On the following day I met Mr.



Steamer "Falls City" passing High Bridge.

White, the owner of the springs, who cordially invited me out to his place. I accepted the invitation, and was highly entertained as he took great pains to show me his place and manner of conducting business at the springs, where he bottles the famous Crab Orchard water. He drove me home by way of the old Whitley mansion, the oldest brick house in Kentucky, built in 1783 of brick carried from Virginia. The woodwork was hewn and carved on the spot. The bricks were black and red placed alternately. The walls were nearly

two feet thick, and the woodwork all hand-carved with ornamental features. For example, carved upon the side of the main stairway were thirteen eagles representing the thirteen colonies. The great fireplace was surmounted by a mantel and woodwork reaching to the ceiling. Deep cupboards occupied either side. The partitions were entirely of wood.



Boone's cabin, High Bridge, Ky.

The outside doors were particularly strong, being composed of a sheet of iron with boards fastened on either side. The windows were not very numerous and were of the small-pane pattern. All the woodwork was of the finest of hardwood and in the best of condition. To all appearances it was good for another hundred years.

We were pointed out the rack upon which Colonel Whitley kept his trusty rifle, with which he fought at the battle of the Thames, in which battle he was killed. The rifle and powder-horn we inspected at the home of his great-granddaughter in the village of Crab Orchard. The powder-horn was richly carved with the following lines:

Wm. Whitley, I'm your horn!
The truth I love, a lie I scorn.
Fill me with the best of powder,
I'll make your rifle crack the louder.
Now hear the dread terrific ball,
Make Indians bleed and Tories fall,
You with powder I'll supply,
To defend your liberty.

Quite a poet, was he not, of the rough old backwoods time?

THE JOURNEY HOMEWARD.

The shadows of the late afternoon were casting long figures upon the lawn as I turned into the hostelry for the night, well satisfied with

my adventures of the day. Returning homeward I stopped at Harrodsburg, which was one of the first three settlements of Kentucky, the other two being St. Asaphs (now Stanford, near Crab Orchard), and Boonsboro. Harrodsburg is beautifully situated, and I spent a very pleasant day there looking up historical points, such as Harrods Fort, etc. I started the next morning for Lexington, driving as far as High Bridge, a distance of eight miles through a highly cultivated region, passing an old Quaker village with a few stone buildings, old mill, etc. We approached the Kentucky River by descending a steep gorge to an old-time ferry. The ferryman we had to call from the opposite shore.

Here I dismissed my driver, and crossing the river, climbed the hill to the hotel. I visited the park, where I saw Daniel Boone's cabin and scenery of striking beauty. I then took the train for Lexington, which in itself is a delightful city; but when you consider the many drives that are to be taken around and about the place, it makes a most interesting spot to visit. I drove to the Patch and Wilkes stock farm. The road led by Henry Clay's old homestead, a beautiful old country seat. Driving through gates and across wide fields



A Kentucky tobacco field.

was no small feature of the interesting trip to the stock farm. Here we were well repaid for the long distance traveled, by being permitted to gaze upon "Peter the Great," a famous horse which has been coveted by foreign governments, but no money can buy him.

In an adjoining barn were two hundred yearlings. So courteously is the visitor treated that these are led out one at a time for his inspection. The truth did not dawn upon me until two or three had thus been led out, when

I called a halt and requested that I be allowed to walk past the stalls, explaining this would amply satisfy my curiosity. I was no judge of horse-flesh anyway. That was done; and from blacks, bays, sorrels, grays, roans, etc., it would be hard to choose. The dilemma was nicely dispelled when we came to the last stall, where the attendant opened the door. Out



The largest barn in the world for trotters.

leaped two Russian greyhounds, which took a run up the lane, enjoying their freedom.

Returning to High Bridge I put up for the night, taking the boat next morning for Louisville. And what shall I say of the delightful scenery of the Kentucky River? It certainly rivals that of the Hudson and I will leave it to your readers to see it for themselves. Suffice it to say that I arrived at Louisville in due time, spending a day there and coming to Cincinnati by boat the same night on my journey homeward.

A SUMMER STAY AT LION'S HEAD, ONTARIO.

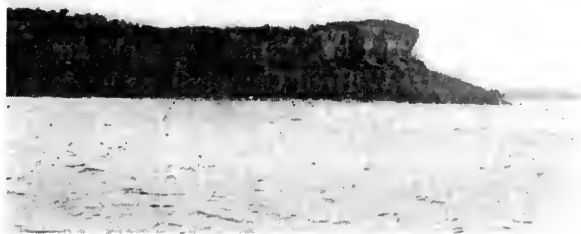
By S. C. COOPER, PH.M.B.

"Thank God for His fresh air," I exclaimed as the stage swung to the left on the white dusty road, and a cool northern breeze from across the blue waters of Georgian Bay fairly slapped us in the teeth. From a vantage ground of about two hundred feet we could gaze across Colpoy's Bay, and as the stage progressed and lurched the beautiful panorama continued changing. On the other side of the bay, like a map of the United States, lay here a field of yellow wheat with scarcely discernible glints of gold, and there a square patch of greenish-yellow inset with a darker square yet to fall prey to the mower-knife. Farm-houses and barns dotted the

landscape. Two or three white churches and a little hamlet lent their interest. A white vessel, called by one of our passengers *The City of Meaford*, was steaming up the bay, leaving wreaths of black smoke in her wake. A tug towing a barge laden with lumber met and hailed her and received a shrill reply. Rocks, poplars, and evergreens were on the slope, while to the right and behind us the buzz of sawmill and factory resounded.

I was off for my holidays. I had had enough of Atlantic City the year before. I thought the soft green turf would be more attractive than the Boardwalk. I was sick of piles of stone and mortar, the clank of trollies, the shrieks of locomotives, the honks of autos, and the hurry-scurry of sweating humanity. I expressed my sentiments to Jack Osmond: "Jack, I want to go somewhere where people are scarce, natural, and simple-lived; where one can see a twenty-mile stretch of the earth as God made it—stones, rocks, trees, birds, and animals; where I can fish a little and loaf a lot; where I can keep cool in the daytime, and comfortable at night, pray when I feel like it, and curse when I've reason to."

Jack slapped me on the shoulder, and with



Point Hangcliff or Lion's Head, Bruce county, Ont.

a hearty laugh ejaculated, "I've got your measure, old fellow. Go to Lion's Head for the next three weeks, and if you don't eventually eat like a horse, sleep like a winter bear, fatten like a spring squab, and tan like an Indian, I'll do something desperate. You'll be twenty-two miles from a railroad, the G. T. R. at that. You'll get any amount of good air, good food, good sport, and good thoughts." We laughed together. He gave the directions, and a few weeks later I followed them.

A RIDE ON A STAGE COACH.

The slow, dirty coaches, smelling internally of stale tobacco smoke and coal smoke annealed, assimilated, and veneered until the last stink of that smoke was worse than the first, appropriately heralded by an unearthly screech from the locomotive, careened over



Natural bridge at Lion's Head.

the rails down the long grade into the lake-split town of Wiarton.

Our stage journey was bordered with rugged attractions. The Bruce Peninsula, I am told, has given and nurtured some solid families that have been a credit to the county of Bruce. I could understand that the Hon. Alexander McNeill, from his eyrie at Colpoy's, should think and read and strengthen his prophetic vision upon the globe-encircling policy of Imperial Federation. I could understand that Mr. Wilfred Campbell, as he gazed into the blue-reflected depths, should sing as though his throat should burst with song. The beauty, the ruggedness, the boldness of it all! Here, crofters' patches of land with uninviting huts; there, fine brick houses encompassed by broad rich acres; further, the blue water again verged by high precipices, and then the rich, rank-smelling underwood. That three hours' stage-ride to Lion's Head, despite the absence of shock-absorbers and the ruts and rocks encountered, remains one of the most beautiful pictures of my memory. That night I prayed and thanked God that he had a back yard and that he had turned me into it, lit by the stars, swept by the winds, washed by the rains and warmed by the sun. And with my window open, after turning out my electric light, in comfort and quietness I slept, and slept, and slept.

Every village has its earmarks, its landmarks, and its characters, and Lion's Head abounds richly in all. The village is named after a bold headland that less than fifteen years ago from a certain point gave the profile of a lion's head. Later the lower jaw fell and spoiled the attraction. It is also named Point Hangcliffe. The village, nearly three miles away, encircles a spur of Isthmus Bay, and a very presentable harbor has been formed. On the north shore is the Natural Bridge; also D  ad Man's Cave, in which the skeleton of a man "who could tell no tales" was found many years ago. At the summit of the ridge on the north side of the harbor are depressions described by the Cape Croker Indians as graves of warriors slain in a bloody Indian battle beside the water, and later rifled for relics for city museums.

Along the south side of the bay is a huge rock called Eagle's Nest, because an eagle had its nest many years on the side of it; and Sunset Cave in the bayward side of it penetrates about twice the length of a rowboat, the cave being as cool as a refrigerator in the hottest day of summer. I drove north to Miller Lake, where I caught twenty-six large pike,



Scene at Barrow Bay.

and lost three hooks by their cutting the line with their sharp teeth, in less than an hour.

GOOD FISHING.

I spent an afternoon near Stoke's Bay on the Lake Huron shore, and hooked fifty-two black bass for my trouble. While driving back to Lion's Head I passed through the low woods, and just before sundown counted eleven wild rabbits that scampered across the road before me at sound of the patter of my horse's hoofs. That is another picture that remains with me—the scent of the woods, the

red sunset, the long shadows, the awkward jumps of the hares, the patter of the pony's hoofs, the white moonlight, the shadows of horse and rig and tree-tops upon the dusty road, the awakening of a cool, damp, refreshing breeze, the twitter from distant frog-swarmed marshes, and the natural loneliness; then upon emerging into the farming settlement, the scent of new-mown hay, and the recently milked herd chewing the cud of passive contentment.

Such trips were alternated by whole days spent in trolling on Isthmus Bay. And whether seeking bass, or pike, or mountain trout, or speckled trout, or salmon trout, each in its respective haunt, Nature grudged not her treasures. Stealthily we rowed along the north and south margins, guiding the boat so that the lake-bed might be visible from one



Stoke's Bay: The Rapids.

side of the boat and invisible from the other, at a speed sufficient for the revolving spoons to keep taut less than a hundred feet of fishing-line. Next to hauling into the boat a sixteen-pound salmon trout, perhaps most enjoyable was eating the flesh, uncontaminated by handling, by shipment, by exposure, and by age.

I could go on writing for a week telling events, traditions, aspirations, and current topics of this little burg. I could tell of the large brown bear I killed. But a settler shot three this season, and hardly ever refers to it unless the details are catechized out of him. I have said enough for the present, but to any one who wishes to have a holiday of the nature I have described, to have cool breezes in July and August, Norwegian scenery to rest

the eye and feast the imagination, a continuous round of sport on land and water, and the homely comfort of a fifteen-thousand-dollar hotel, all "far from the maddening crowd's ignoble strife," and at a minimum of expense, to such a one let me say: "Spend your next summer vacation at Lion's Head!"

ON THE GULF COAST.

BY JEWELL A. STILL, ARKANSAS CITY, ARKANSAS.

My vacation last summer was a most pleasant one, being spent on the Gulf of Mexico. The city of Port Arthur was the headquarters of my whole stay.

To me the most interesting places in the country were the oil wells and the Gulf itself. The country is lined with clam shells which make the finest of roadbeds. Many street walks are also made of this material. The depots are all like the old pioneer stations. In other words, they are like we imagine the Mexicans, and to go back we may say the Aztecs. A considerable number of the original Mexicans dwell in this country.

Any who have ever been on the coast may know that the Gulf looks like a mountain—that is to say, the water seems to get much higher with the distance. The mosquitoes are so thick as to almost stifle people who are not used to them; frequently they kill cattle and sometimes bore the natives considerably. At any rate they put me to a great amount of unnecessary annoyance. We were allowed to go aboard a battleship, which is always a real treat to most people in the Middle West.

The largest or one of the largest oil wells in the whole country is located in Port Arthur, Texas. We noticed several up-to-date drug stores in this and other towns, all of which seemed to be doing a good business.

We were allowed to accompany a fishing expedition which consisted of about a dozen men and a new sailboat. A fish known as the toadfish was the chief attraction. As you may imagine, toadfishes are funny looking creatures. Every time one is caught he swells his sides just like our ordinary toad. The expedition lasted ten days. Those who took part in it say they were well paid for their time and trouble and will go again.

THE NATIONAL ASSOCIATION OF BOARDS.

What it has Endeavored to Do—What it has Actually Done—What the Future Holds Out for It—A Story of Good, Honest, Necessary Work Well Performed for the Betterment of American Pharmacy.

**By ERNST O. ENGSTROM, Pittsfield, Mass.,
President of the National Association of Boards of Pharmacy.**

I am afraid I may tire you if I should write all the good things I know about the aims and achievements of the National Association of Boards of Pharmacy. Consequently I shall try to condense it as much as possible, but will try to make clear the objects and history of this excellent organization.

ORIGINAL PURPOSE OF THE ORGANIZATION.

In accordance with a resolution passed at the Mackinac meeting of the A. Ph. A. in 1903 a conference of delegates from the various State boards of pharmacy was called together the next year at Kansas City under the chairmanship of George Reimann of Buffalo. At an informal meeting a committee was appointed to suggest subjects for discussion by the conference, and the committee reported as follows:

We suggest an exchange of certificates between the States based upon the following propositions:

First. Examinations to be uniform so far as possible.

Second. The organization of a national conference to consist of a delegate from each State board, said conference to convene annually during the meeting of the A. Ph. A. to consider the general work of the year.

Third. We suggest a definite standard of requirements for colleges of pharmacy. (This I will pass over as it is not within the scope of our work except as it pertains to the Syllabus Committee.)

Fourth. We would urge the requirement of three years' practical experience in a retail drug store, where physicians' prescriptions are compounded and dispensed under the supervision of a registered pharmacist; or graduation from a recognized school of pharmacy.

As was expected, the report developed a long and at times heated discussion. After some hours a number of the delegates present feared that it would be impossible to find sufficient ground for all present to stand upon with entire comfort and harmony; but it was evident throughout that all were sincere in their desire to attain the object of the meeting, and in the end there was reached a unanimity of opinion which was most gratifying.

Attention is called to the fact that thus far the action of the conference was wholly informal. The free exchange of opinion on the part of the delegates present, together with their sincerity, persistence, and patience, made it evident that the conference had not been in vain, and it is noteworthy that it was at this point that the decision was reached to effect a permanent organization. A constitution and



E. O. Engstrom.

by-laws were unanimously adopted on September 8, 1904. Twenty-six boards of pharmacy were represented by one or more delegates, and Mr. M. Bernstein, Shreveport, Louisiana, acted as secretary. The association must thank Dr. Murray Galt Motter for the preservation of the records of this meeting, as I do not believe there is more than one copy in existence, which I obtained through Ernest Berger, Tampa, Fla., this year.

The second annual meeting of the association was held in Atlantic City and the general organization was completed. Dr. Motter read

the constitution and by-laws by sections and recommended some changes and amendments which were unanimously adopted. Committees were appointed to work for the interest of the association. George Reimann presided at this meeting and E. C. Bent of South Dakota acted as secretary in the absence of Mr. Bernstein. I. A. Keith of South Dakota was elected president, and Ernest Berger of Florida was elected secretary. The committees thus far named were the Executive Committee, the Committee on Legislation, and the Committee on Compilation of Pharmacy Laws.

GUIDING PRINCIPLES.

The third annual meeting was held at Indianapolis and 11 active and 12 associate members were reported among the boards. At this meeting it was first decided that a report of the proceedings should be sent to each board of pharmacy. In this manner the aims and objects of the association would become more widely known. The Syllabus Committee was established, Wilhelm Bodemann of Chicago was appointed as the association's representative on this committee, and the following recommendation was adopted:

1. All laws and regulations governing the licensing of pharmacists should make due distinction between apprentices, clerks, and principals, and should establish definite minimum qualifications and indicate the rights and duties of each of these three classes of pharmaceutical workers.
2. No person should be licensed to practice as an assistant pharmacist who has not attained the age of 18 years.
3. All candidates for license to practice pharmacy should be required to pass such examination as may in the opinion of the board of pharmacy be deemed necessary, but all candidates should be examined upon their ability to correctly read and dispense prescriptions.
4. A preliminary general education of not less than a grammar school graduation should be required as a prerequisite to the pharmaceutical experience or apprenticeship required for the licensing of registered pharmacists or assistant pharmacists.
5. In the determination of the fitness of any applicant to receive a license to practice pharmacy all important facts of his educational history, practical experience, and technical services should be taken into account, including his preliminary general education, his special education in pharmaceutical and other related technical schools, his practical experience in pharmacy and the result of the examinations he has passed, and an average of these three general factors, each assigned its appropriate value, should be adopted as the passing grade.
6. Definite and uniform conditions of efficiency should be adopted which all pharmaceutical schools must comply with in order to receive recognition by

the Board of Pharmacy, and in all cases where students and graduates of such schools receive credit in any form for the courses they have completed or for the time of attendance at such schools, these conditions of efficiency should be made public and should be applied equally to all schools. The conditions of efficiency prescribed for the recognition of schools of pharmacy should relate solely to matters affecting the character of their educational work.

7. Special education for the practice of pharmacy is in this age a necessity and should as rapidly as possible be made compulsory, and the rules of the Board of Pharmacy should be such as to promote and encourage it in all practicable ways. The special pharmaceutical education should include substantial laboratory courses.

8. A Syllabus of Pharmacy Examinations should be prepared which shall indicate the subjects to be included in the board examinations as well as in the courses of instruction in the pharmaceutical schools, with the view to the attainment of a reasonably uniform standard of minimum requirements which may be adopted.

9. It is recommended to all concerned that the foregoing principles and standards be adhered to in any amendments to the pharmacy laws hereafter proposed in order that national uniformity may be ultimately attained. The minimum requirements indicated, and especially the preliminary general education, should be increased from time to time as circumstances permit.

10. It was further strongly urged that the Boards of Pharmacy employ the discretionary powers already theirs under the existing laws to improve the educational status of the pharmacists of the future.

WORK DONE FROM YEAR TO YEAR.

The association also adopted a recommendation declaring that the various State boards which interchange certificates should recognize the pharmacists of the U. S. Navy and the Public Health and Marine Hospital Service as entitled to receive the same privilege in the matter of interchange of licenses as was accorded to the licentiates of the various States. It was also recommended that all boards belonging to the association provide for an interchange of certificates of registration whenever compatible with existing laws, and that where present laws did not admit of such interchange, endeavors should be made to secure amendments making a general exchange possible.

A committee on Questions and Methods of Examination was appointed whose duty it was to prepare and submit a set of questions in the several branches of study. Such questions were to be regarded merely in the light of suggestions and guides, and it was hoped that the labors of this committee would bring about a greater degree of uniformity in the examinations of the several States.

At this meeting G. C. Diekman, of New York, acted as secretary *pro tem.*; F. C. Godbold, of Louisiana, was elected president; and Mr. Diekman was elected secretary.

The fourth annual meeting was held in New York, and the same earnest desire to improve examinations was manifest. The several States reported through their delegates present that in the majority of cases great reforms had been introduced in the character of examinations and in the methods of conducting them. Dr. Wiley of Washington, D. C., was present at this meeting and was so impressed by the earnest discussions that he strongly commended the delegates present for the good work they were doing. F. A. Hubbard, of Massachusetts, was elected president, and A. F. Sala, of Indiana, was elected secretary.

The fifth annual meeting was held in Hot Springs, Arkansas. The Committee on Questions and Methods of Examination deviated from the work previously done by the committee, and instead of reporting sample questions suitable for examination presented a report which showed exactly what each State board was doing, and which included three or four hundred questions picked from written examinations. This enabled every member to see what the actual requirements were in the different States. A table printed on page 22 of the report of this meeting was of great help to the members. It was here decided that an average of 75 per cent should be attained by the candidate who expected to secure a reciprocal certificate in another State.

Among other things done were the following:

The association strongly indorsed such practical work as the dispensing of prescriptions and the manufacture of pharmaceutical preparations in all examinations, and it was urged that all boards take measures to include this in their requirements.

A new set of application blanks for candidates who wished to obtain reciprocal certificates was drafted at this meeting.

The establishment of auxiliary branch associations of the National body, to include three or more States bordering on each other, was recommended.

Four years' practical experience in a drug store was adopted as a minimum prerequisite to a certificate of registration in pharmacy.

F. B. Lillie, of Oklahoma, was elected presi-

dent, and A. F. Sala, of Indiana, was elected secretary.

INTERCHANGING CERTIFICATES.

The sixth annual meeting was held in Los Angeles, California. This was the first year the secretary was able to report how many certificates had been sought and secured through the National Association rules, and the table given on page 13 of that year's report shows the number to have been 177. The president urged the need of assistant registered pharmacists and stated that the number of fully registered pharmacists was too great. He recommended five years of practical experience and a higher standard for the examination of a fully registered pharmacist, and the issuance of certificates as qualified assistants in all cases where these higher educational requirements were not fully met.

The Committee on Questions and Methods presented the written answers given by a candidate who had passed an examination before a board of pharmacy. The committee requested the members present to mark the answers and grade them according to their best judgment. This experience proved that the markings differed and ranged from 69 to 82 per cent, with an average of 73 5/6 per cent.

Since the last annual meeting several auxiliary associations had been formed. John D. Muir, of Michigan, was elected president, and A. F. Sala, of Indiana, was reelected secretary.

The seventh annual meeting was held in Richmond, Va., in May, 1910. Six standing committees, doing good work during the year, submitted reports, and a sample examination for registered assistants was submitted. In the eight months which had elapsed since the last meeting, 157 certificates of registration had been granted through the reciprocity plan established by the National Association, showing a slight gain over the previous year's report.

Some of the States which had not previously reported how they conducted their examinations gave complete data and submitted questions which they had used.

Other members reported changes and improvements. By retaining the reports of the proceedings of the association from year to year every board of pharmacy can easily determine what the standard of examination is in any State.

WHAT THE BOARDS HAVE ACCOMPLISHED.

I have now given a short history of the proceedings as reported from year to year, and I can truly say that the first object of our association has been fully established. That is: *"The interstate reciprocity in pharmaceutical licensure based upon a uniform minimum standard of pharmaceutical education."*

More than this, the development of proper examination methods in many States is undoubtedly due to the influence of our association. The first and second annual meetings brought out the fact that slipshod methods had been practiced in many States. Certificates had been granted without thoroughly testing the candidates' fitness. Were it not for the character of the members taking part in the deliberations, and the evident desire of each to improve his own standards and to help others to improve by offering the right kind of suggestions, I question if the association could have accomplished as much as it has in the short time it has existed.

When I read the criticisms of men in the drug journals I am reminded of an instance where one of these journals printed an examination paper as having been used by the Massachusetts Board of Pharmacy. I knew that such an examination had not been given by our board during the three years I had been a member of it, and some of the questions pertained to the U. S. P. 1890. I wrote the editor of the journal, telling him that the publication of such questions would give a wrong impression of the up-to-date methods employed by our board, and would give the critics good reason to shout that "obsolete questions are asked by the boards of pharmacy." I received a reply admitting that the examination was undoubtedly several years old, and congratulating me on being able to see that the questions were obsolete in character.

The National Association of Boards of Pharmacy now has 36 members who look upon the annual meetings of the association as a place where ideas are presented for the betterment of board work.

Our organization has become a clearing house for improved methods in board examinations. At our yearly experience meetings the interest is intense, and every delegate is found in attendance. When our deliberations are over it is with a feeling of satisfaction that something new has been learned.

The points for betterment of the work which the delegates are able to take home to their respective boards have well repaid them for the time and expense.

We are progressive, adding something every year. Last year a Committee on Legislation was made one of our standing committees. The information this committee will furnish will help us all in making out our annual recommendations to our respective State authorities. No State board of pharmacy can afford to remain outside of the organization, and not one of them can escape its influence for good. Our orator from the Lone Star State, the Hon. R. H. Walker, says:

WHY EVERY BOARD SHOULD JOIN IN THE WORK.

There are several pertinent reasons why every State should give undivided support to the National Association of Boards of Pharmacy, for surely the efforts of this organization are all directed toward the ultimate aim of benefiting and strengthening each State board.

1. A congregation of ideas in the interest of good purposes commands strength and insures the success of the ideals cherished and the attainments begotten by hope.

2. The combined counsel of the many frequently furnishes a ready solution of knotty problems that may confront the various State boards.

3. Reciprocity agreements are the foundation stone upon which rests the entire fabric of justice and equity, of practical service and profit between nations. Such relations are equally as feasible between the State boards, combining to engender good fellowship, advance a community of interest to a high plane of adjustment, insure the laboring together with brotherly love toward the same good end, namely, better understanding of mutual good and the material growth of our profession to higher standards of proficiency.

4. The strong and powerful relations established by reciprocity are beyond the experimental stage. Therefore every State board of pharmacy should be persuaded to join hands with the many and contribute their part in making the National Association of Boards of Pharmacy more useful and powerful in its warfare for more enlightened and highly cultured pharmacy.

A letter written me by a secretary from a Southern board gives the following information: "We now hold an examination lasting two days on the following subjects: Chemistry, pharmacy, materia medica, posology, toxicology, practical work, prescriptions, oral work, and identification of specimens. It requires from 18 to 20 hours to complete this work, and we do not stop for the midday meal. After January, 1912, we shall add bacteriology and physiology to our list of subjects,

and shall require three days' time to complete the examination. We also hope to have after January, 1912, an additional educational requirement of one year's work in high school, and full graduation from high school after 1915. We feel we are advancing some, and we are bending all our energies to keep abreast with the popular demand for more proficiency in those who seek to practice pharmacy."

THE FUTURE.

The membership of each State board of pharmacy is yearly changed. Personally, in accordance with our State law, I complete my labors as a member of the Massachusetts Board this year. The more active members of the National Association must all of them in time sever their connection with this work.

but the foundation laid upon the solid rock of mutual confidence between the States will enable their successors to build such a structure as will guarantee that the standard of American pharmacy will be recognized as the highest and best of any nation in the world. This National Association of Boards of Pharmacy has so many advantages over the examining boards of European countries that I fully believe its influence for the betterment of pharmacy will extend beyond the seas. What its future aims will be it is hard to predict.

I feel sure that the National Association of Boards of Pharmacy will have the most enthusiastic gathering of delegates at the Boston meeting in August that it has ever had, and that more States will be represented than at any previous meeting.

SANE COMMENT ON CURRENT TOPICS.

Annual Address of the President of the Michigan State Pharmaceutical Association—An Intelligent and Interesting Survey of Conditions Affecting the Pharmacist at the Present Time.

By E. E. CALKINS.

GENTLEMEN—The year just past has been, I believe, a prosperous one for most of the druggists of this State. It has not been a time for making money easily, but has afforded the usual opportunity of making a living. While cut prices and itinerant venders have reduced the profits in some localities, there have been few failures, if any, and business has moved along smoothly for most of us.

THE MILES PLAN.

Some things have happened this year, however, that are worthy of notice. First among these is the failure of the Miles plan. We had all believed that the contract on these goods was impregnable. We now know that it cannot hold. Nor is there promise of any future plan by which retail prices can be controlled when the goods are sold through jobbers. We are all familiar with the direct contracts under which Eastman kodaks and certain brands of collars are sold, and it may be that if we are to get full prices in the future we shall have to sell only those proprietary medicines which are sold direct from maker to retailer. Certain it is that there will always be those who

will use advertised brands at cut prices to attract trade.

ITINERANT VENDER LEGISLATION.

Another item that has been brought to our notice very forcibly is the decision which swept away the itinerant vender law in Illinois. This law has been the model for legislative work in all the States where similar legislation was attempted. The failure to secure a similar law in Michigan two years ago by our committee, and the failure of the committee from the Michigan Retail Druggists' Association to secure the passage of a modification of it this year, merely repeat the story of similar failures in other States. The only real gain has been made in Indiana this year, where the pharmacists secured a law which prohibits the sale of drugs and medicines within two miles of a pharmacy. This really reserves to the registered pharmacist the business of all the most thickly populated territory, and may well be copied in our own State.

Up to this time, all pharmacy laws, so far as I have been able to learn, have been written for the protection of the public only. The

pharmacist has been made to comply with certain restrictions if he would conduct a pharmacy, but in return provision has not been made to restrict the sale of drugs and medicines to the registered, qualified pharmacist, except in the sale of certain poisons and the preparing of physicians' prescriptions. The laws of different States differ on this point, but in the main it is true that department stores and general stores may and do sell much of the merchandise that ought, in all justice to the pharmacist, to be sold only in drug stores. This new Indiana law is a step in the right direction.

THE THREATENED STAMP TAX.

Just now we are threatened with a new stamp tax on proprietary medicines for national revenue. The N. A. R. D. is moving to prevent its passage, but my experience with our State legislature has convinced me that the surest way to control the vote of our representatives in congress is to let them hear from home. If every Michigan druggist will write a personal letter to his representative and to both of the state senators, pointing out that the proprietors will not pay this 3 per cent tax but will instead increase it to 5 per cent and add it to the wholesale price; that while the retailer must pay this 5 per cent he cannot pass it on to the consumer because of the fixed retail price; and that it thus becomes an unjust tax upon the retail druggist; I am sure that we can secure the opposition of the Michigan delegation in Washington. Personal letters, many times multiplied, have more effect than the same number of names on a petition.

THE PARCELS POST.

I am aware that I shall be considered a heretic if I express my views upon another national issue—the parcels post. I believe in the parcels post. I believe that the express companies get most of their revenue from the retailer, and that the retailer would be also the greatest user of the parcels post and at a financial saving were it established. I do not believe that it would destroy the retail drug business, but that the retailer could use it, not only to reduce his transportation bills, but also to deliver his goods to his customers and to get more business. I believe that the sentiment against it as voiced by trade organizations has been largely originated and incited

by the express companies, and that the retailers are opposing a measure which would prove a benefit to themselves.

THE POISON-CORK BILL IN MICHIGAN.

One bill that passed the legislature last winter and takes effect November 1 is worthy of our attention, viz., the Hinckley Bill. This provides that the State Board of Health shall select a suitable cork top with serrated edges and mail specimens to every retail and wholesale druggist. After November 1 any person who fails to put one of these on a bottle of poison will be liable to a minimum fine of \$90 or imprisonment of not less than three months.

I am sure that every druggist is anxious to prevent accidents and is willing to use any reasonable precaution, but as it stands the law is a menace to every one of us. Let us suppose that a purchaser finds that the serrated edge cuts his finger, and so changes the cork for a plain one. How is a druggist to prove that he used the device prescribed by law, if after a month, or even a week, a case is brought against him and as evidence a bottle of carbolic acid with a plain stopper is produced?

Or, suppose later a child gets hold of the bottle of carbolic acid and is burned. Action for damages would at once be brought against the druggist, and the judge would instruct the jury that if they found the druggist was negligent in that he did not use the stopper provided by law, they must find for the plaintiff and assess damages. These cases may be brought up any time within two years after an accident—long after an accident—long after the dispenser has forgotten whether he put a plain cork in the bottle or not. What can a druggist do in such a case? I believe that a committee from this association should see the president of the State board of health at once, urging upon him the necessity of selecting a device that would *not* be thrown away by the customer, and I believe that the law should be repealed or amended at the next session of the legislature. I would also protest against pharmaceutical regulations to be enforced by the board of health.

DEPLORES TWO ASSOCIATIONS IN MICHIGAN.

I cannot refrain from expressing my regret that we have two associations for druggists in Michigan. The new association was formed just at the time when the condition of this as-

sociation was most promising, when it was increasing rapidly in membership, and had secured the active coöperation of the traveling men. The new association has caused a division of interest and effort, and while there was dissatisfaction with what was accomplished by our legislative committee two years after it had secured the passage of two bills complete as written, and had made an honest effort to accomplish more, I have not been able to learn that the legislative committee of the M. R. D. A. has accomplished any more.

I still believe that the same amount of work put into one association would accomplish more, and I trust that the officers of this association will make every effort to bring about a union of the two. I also suggest that the nominating committee bear this in mind when selecting officers for next year. For this reason I request and shall insist that the custom of electing the retiring president to the chairmanship of the Executive Committee be disregarded.

This association, with its twenty-eight years of active history, incorporated, recognized by law as the parent of pharmaceutical legislation to whom the Board of Pharmacy shall report, and with its Prescott Memorial Scholarship fund, should I think continue. If the management and personnel of the officers are not acceptable to the whole State, by all means let us change them so that all the druggists in the State may unite for their common good.

THE POSITION OF THE PHARMACIST.

The position of the druggist in the business and professional world is a peculiar one. Doing work which demands education and skill, and required by law to prepare himself for it, he is still not recognized by the public as a professional man. No druggist is ever publicly called in consultation by another, because of his greater professional ability. Neither does the public willingly pay him a professional fee. He is looked upon by the physicians and the public as a skilled tradesman who is in a position to overcharge the public for his services. And yet he must employ men who have had like training to assist him in his dispensing, and must pay them as much per year as a physician, lawyer or dentist would be paid were he hired by the year to work in the office of another. On the other hand we have a feeling that we are more than trades-

men, and in the majority of cases this feeling is so strong that we neglect to get the commercial training that is required for success in mercantile pursuits, and the most of us are SMALL tradesmen.

In some cases propaganda movements will succeed in bettering these conditions, especially in our relations with the physicians, but it is also true that the amount of pure pharmaceutical work in many places is very small and other stores are allowed to sell so much merchandise that ought to belong to the drug store alone, that druggists are compelled to compete with other stores on a purely commercial basis without the commercial training of their competitors, and yet are compelled to employ a high-priced clerk.

A SUGGESTION.

It has occurred to me that in some stores it might be profitable to select those things which can only be dispensed by a registered pharmacist and put them under lock and key, to be dispensed only by the proprietor or manager when he is there, and then to hire cheaper help to make sales, as do the department stores. Whether this is practical or not, I am not prepared to say, but I believe that druggists may improve their financial condition by copying the methods of the department stores in respect to window and store displays, attractive prices on certain leaders to attract trade, better advertising, and more wide-awake management generally. If a druggist must compete as a business man, let him use the methods that bring success in other lines which are exclusively mercantile.

In the meantime, let us also not neglect to cultivate the professional side of our calling, looking forward to the time which we all hope for, when pharmacy as a profession shall come into its own. Let us encourage our clerks to get the best education possible, and let us while training them along mercantile lines, hold up to them also the higher ideals.

In closing I wish to thank you all for the many courtesies which I have received from your hands during my six years' official connection with this association. The many delightful personal acquaintances which have been made, and the pleasant memories of my association with you during these years, have repaid and will repay many fold for all the time and effort I have given to the work.

CONDUCTING A CIRCULATING LIBRARY.

**A Profitable Side-line—Why the Druggist Should Own His Books—"Best Sellers"
Always in Demand—Benefits that Accrue to the Owner of the Library.**

By C. A. WEAVER.*

After running a circulating library for three years as a branch, my experience, coupled with some information borrowed from others, who still continue to plug some one else's game, for the mere pittance of from 5 to 20 per cent, led me to believe that operating one's own library was well worth the trial. And I have since proved that a library thus operated is a most profitable side-line, as I will endeavor to show.

THE QUESTION OF VARIETY.

The average branch circulating library consists of from eighty to one hundred and fifty books. And in a city the size of Detroit there may be as many as from fifty to one hundred branches. It has been contended that in order to make the scheme a success, the books at the different branches must be as varied as possible, to allow of changes as often as certain books become dead in the different locations.

Our experience with a system of this kind proved that the everlasting changing of books was a bad thing for the library, inasmuch as the readers or their friends continually asked for the books that had been taken away. This was also true of newer books, a few of which only would appear in the library until many months had elapsed since their publication.

This absence of the newer books was the worst feature of the old library. Constant excuses on our part for the owner's management or mismanagement were necessary.

The average library of this kind is made up of from 50 to 75 per cent of the older books, the copyrights of which have run out, and which may be purchased at wholesale prices varying from 19 to 38 cents. The balance of 50 to 25 per cent may be made up of the more recent and popular editions, which, as a rule, are quickly taken up by the more up-to-date readers, leaving at all times a vastly

larger number of the old "has-beens" than is good for a supposedly healthy circulating library.

In contradistinction to the foregoing, in owning your own library, you buy only those books that are in demand. Consequently you have them when they are new, and, of course, have enough copies to supply the demand whatever it may be.

THE CIRCULATING LIBRARY A SUCCESS.

It is surprising to see the repeating qualities of some books, while others are a complete disappointment. But I believe, after the reading of this paper, you will agree with me that, taken as a whole, a circulating library is a most successful side-line.

A circulating library is apt to be—in fact, should be—a success, because the average reader cannot afford or does not like to pay from \$1.25 to \$1.50 for a work of fiction that once read becomes of but little or no value as a permanent addition to his library.

The circulating library supplies this same demand for popular fiction at the extremely low price of 2 cents a day, with a minimum charge of four cents, making it possible for the reader to keep up to date on all good reading. It also places at his command from 15 to 37 books for what the price of a single copy would be.

Our experience shows that the average reader pays from 4 to 10 cents for each book taken out. Compare this with the average price of the cheaper magazines. They read from 2 to nearly 4 books by the very best of fiction writers for the cost of one, often mediocre, magazine. Some readers, through negligence or an inability to read quickly, return the book late, and, therefore, pay even as much as the full price of the work. While to allow a customer to pay full price of a book is in our estimation a poor plan, at the same time it is one that it is almost impossible to get away from. Still it is evident in this case, as in all others, that the minute you break a

*A paper read before the Michigan State Pharmaceutical Association.

rule it no longer holds good with any one, no matter how small a license he have in thinking he should be so favored.

In order to avoid these troublesome cases we have decided to adopt at once a system whereby the customer is given a card on which are recorded all the details pertaining to the taking out of a book and its return. This card remains with us and is filed away. Thus we can put a time limit of ten days on each book. At the end of that period if the book is not returned, the customer can be notified. I believe the one disadvantage in operating one's own library, namely, the loss of the books, will be minimized or entirely done away with.

THE ADVERTISING BENEFITS.

The advertising advantages that go with a privately owned library are of the greatest importance and should by all means be credited to it. Instead of advertising the goods of little or no profit, as is done in some corporation-owned libraries, you advertise your own preparations. Insert write-ups about your own store, your methods of doing business, little toilet hints to the ladies, cigar write-ups for the men, and many other things too numerous to mention.

Some druggists say they do not know how to conduct such an advertising scheme. My advice to them is to take up some good system of drug-store advertising and select from it the parts that appeal to them or their trade. From these let their printer make copies for inserts. Take a dozen or two of these ads. and have them printed together on one large sheet. Next order from an engraver a cut of this group of the size of the insert that is to be used. This is merely a suggestion for purposes of economy. The dozen ads. printed on one large sheet cost much less than the individual inserts printed separately. At any rate the expense of buying the system and printing the inserts too would be but a small item.

In other libraries, manufacturers pay a good price for the privileges of inserts, a great deal more than the cost of printing. In one case the insert brings you little or no profit. But again where the druggist owns his own books and controls the advertising, the profit is large. Here is one real advertising medium. Think of the ads. that may be

written of your own private specialties not carried by the average store, and which always interest your customers.

METHODS OF SELECTING BOOKS.

In the selection of books, several methods present themselves. For instance, there are the criticisms of the different reviewers or the following of the most popular authors and illustrators. Many readers, too, size up a story by the pictures. Still another method we use is that of visiting the more prominent wholesalers of books and buying only those which they purchase in the largest quantities. A review may express but one man's opinion, and his ideas may be entirely different from those of the reading, fanciful public. You may depend on it, the book store will seldom be fooled. It is their business to buy books that sell, and it is dollars to cents that their judgment on what books will be read or in demand will be more nearly correct than the reviewer's.

There is a great deal of pleasure as well as profit in keeping a library up to date. Then, too, it is a good ad. for one's store to be able to say at all times, "Yes, we have this book in our library," even if at the time it is out. A good scheme in connection with this is to take the customer's name and to call his attention at the first opportunity to the fact of its return to the library.

The number of copies of any one book that might be placed in your library must be left entirely to your own judgment. But at the outset I would advise single copies only. Such books as "The Rosary," "The Shepherd of the Hills," "The Trail of the Lonesome Pine," "The Second Generation," and many others, when new, were in very great demand, and two or more copies might be used in such cases.

In starting a library, your own judgment and capital must say how many books to install, but I would advise at least fifty. The rental money from these should then be reinvested, until the library is built to a point where you are satisfied with its proportions and earning capacity.

We expect to build our library up to 1000 volumes. At present, after a year and a half, we have 275 volumes. One can scarcely add more than 25 to 50 books a year, since there are seldom that number of good books of fiction published.

THE ADVANTAGES SUMMED UP.

To sum up the advantages of owning one's own library, I would mention:

1. Larger profits.
2. Advertising advantages.
3. A more complete line of latest books.
4. Once in the library, books are always a part of it.

As a last remark, our library has shown most satisfactory results. It not only paid for itself the first year, but also showed a profit of over 100 per cent. The first five

months of this year the profit on the new investment has been nearly 300 per cent. Compare this with the old system, where you make from 5 to 30 per cent only, besides not owning one book. The other fellow has possession.

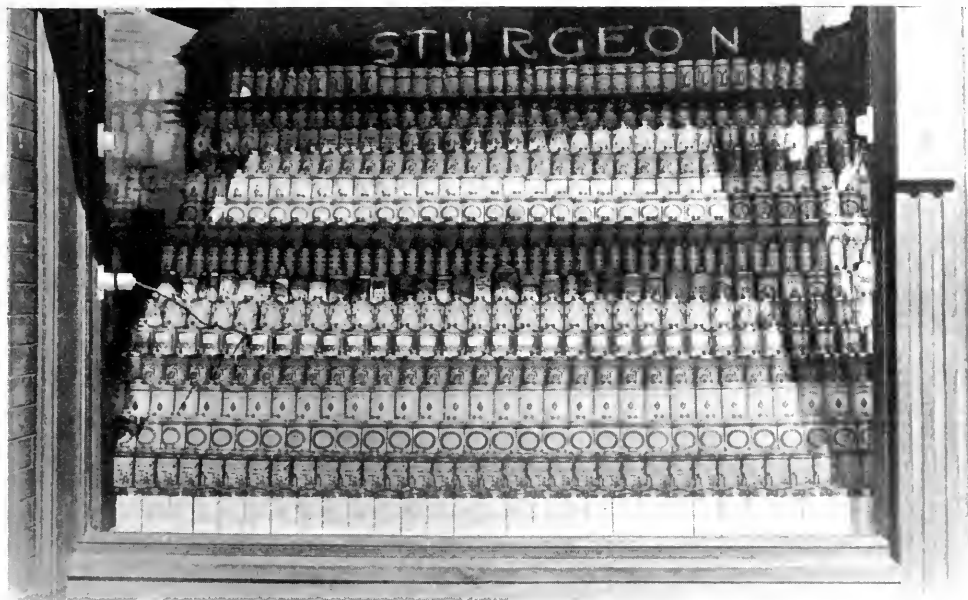
Our losses were unusual, as they totaled nearly 10 per cent of our library. Most of these books were drawn by people leaving the city, and some few were taken out under fictitious names. Under the card system, with satisfactory references from each customer, I believe we can stop such leaks materially.

AN IMMENSE TALCUM WINDOW.

Nearly seven gross of talcum powder packages in the window at once represents a display of unusual proportions. But such a trim was actually seen in the store of W. J. Sturgeon, of Kittanning, Pa. There were 700 packages exhibited together, representing 35

sizes ranged from pound jars to 4-ounce tins, in a wide and varied assortment.

Arranging the trim must have involved quite a little work, for we can count sixteen rows of powder. That means that as many shelves had to be set up before one could pro-



different brands. The goods rested on glass shelves and at night were illuminated by a flash of three 60-watt lights, making a very pretty show.

We won't attempt to name the different powders on display, but it is safe to say that none of the popular ones were omitted. Among the various odors were violet, carnation, cashmere bouquet, and heliotrope. The

ceed with the rest of the trim. Each shelf supported over 30 packages.

The very size of the display, not to mention the artistic designs characteristic of talcum powder containers, doubtless made a vivid impression on people passing by. Especially at night, when the lights were on, the varicolored packages must have been very attractive.

DRUG-STORE SKETCHES

ALGERNON TAKES A HAND IN THE TELEPHONE GAME.

By CLEO C. LONG.

"There!" announced Algernon, driving the last tack in a neat new sign above the telephone, "that *may* hold 'em for a while, but I doubt it. It takes more than kind words to infloonce these dames with the telephone habit."

"What does it say?" asked the pretty cashier, absently running her finger over the grill work of her cage in search of her most recent wad of chewing gum.

"It reads thus," declared Algernon with dignity:

"OUR PATRONS ARE AT LIBERTY TO USE THIS 'PHONE, BUT ARE REQUESTED NOT TO ABUSE THE PRIVILEGE. PLEASE LIMIT YOUR CONVERSATION TO THREE MINUTES. GIVE OTHERS A CHANCE."

"Some sign, eh?" he commented. "Conveys a gentle and subtile hint to the average intelligence, does it not? This, little people, is an example of the art of using language for the purpose of speech, as it were."

"Did you cook it up?" asked the soda-fountain boy, not without admiration.

"Not entirely," admitted Algernon modestly. "The boss wrote the words and I wrote the music, but your Uncle Algy is the boy that put it in printin'. Is it not a pretty thing?"

"Well, I bet it don't do no good," concluded the soda boy pessimistically. "First place, take that bunch o' girls whater always droppin' in after the matinée to use the 'phone. It won't touch 'em. If you want to hand *them* one, you gotta put it to 'em straight. Put up a sign that says 'Beat it, kiddo' or 'On your way,' and they'll know what you're talkin' about."

"Right you are, Clarence, my boy," admitted Algernon. "But listen: the next one of that bunch that comes in here to hand hot air to her beau is goin' to get something handed to her special, from me! Say no

more," he added mysteriously, "Vendetta! But keep your eyes on little Algy."

That afternoon about five o'clock, while the matinée rush was on at the soda fountain, and the cashier was very busy accepting payment for the refreshment so swiftly dispensed by Clarence and his assistant, Algernon, temporarily at leisure, assumed an easy attitude in the passage that led to the telephone and looked guileless. As the rush began to subside he was approached by a sweetly pretty little thing in a very tight skirt, very short coat, nobby little hat, and tan pumps. She looked as if her name might be Gertie, and she had just partaken of a strawberry cobbler.

"I'd like to use the 'phone, please," quoth Gertie with some hauteur.

"I beg your pardod?" said Algernon, instantly alert and giving evidence of the closest attention, "I didn't catch whad you said. I'b chuck full of quidide, od account of a cold."

"I said I'd like to use the 'phone a minute," repeated the sweet girl creature as one who demands an obvious right. "Will you let me pass?"

"Sassafras?" remarked Algernon, assuming a look of enlightenment. "Certainly. Id whad forb?"

"I didn't ask for sassafras," asserted the girl, growing both embarrassed and indignant, and enunciating very distinctly. "I only want to use the 'phone a moment on important business."

"If id's for dizzidess I'd advise you to ged a prescribtion frob a doctor," suggested Algernon. "Calobel, perhaps, not sassafras."

"Gee, but you're deaf," shrieked the blushing girl. "I don't need any medicine at all. I want to use the telephone," indicating the instrument with an unmistakable gesture.

"Ah, sure, sure, call up the doctor dow, and I'll be with you agaid in just a moment," said Algernon, and then he vanished behind the prescription case.

Gertie, much relieved, approached the 'phone and called for a number, keeping one watchful eye on the entrance to the prescription department, in evident dread lest Algernon should reappear and force her to accept either calomel or sassafras. But Algernon had evidently found other business, and presently the girl got some one on the wire whom she joyously hailed as "Toodles."

The soda fountain rush had abated, and

Clarence edged along toward the end of his domain and kept one ear open for the telephone talk. What he overheard called forth the following interpolated comments:

"Is that you, Toodles? Guess who this is." (Aw, gee, that guessin' game gives me the botts.) "I'll bet you *do* know. Say, do *many* girls call you up at the office?" (Gawd forbid, fer the feller's sake!) "Well, listen, Toodles; didn't I say I'd call you up if I was down-town to-day? Uh-hu. Well, listen, I *am* down-town now, uh-huh, at Pillpenny's, uh-huh. Don't you think I'm too little to be down-town alone?" (Ain't she the young romp?) "Sure I'm alone, uh-huh; been to the matinée with Mabel and Sadie, uh-huh. Oh, pretty rotten, uh-huh. Yes, they've gone home, uh-huh. I had an awful time loosin' them, uh-huh. I told 'em I had a date with the dentist, uh-huh. Wasn't that just too cute?" (Heaven keep the loffter from me lips! muttered Clarence.) "Well, listen, Toodles; I think I am too little to go home *alone*, don't you? Honest, don't you think so? What time can you——? What? Sir? Oh!"

Gertie's face suddenly took on a look of surprised horror. "Oh!" she gasped again, and hastily hung up the receiver and hurried from the store.

A moment later Algernon came weakly out from behind the prescription desk. He was evidently laboring under extreme emotion, and he clutched the nearest show-case for support.

"Gee, what happened to the Gertie girl?" demanded Clarence. "She was spielin' along like a hot-air furnace full of molasses, when all at once she biffs it on the hook and you ought a' seen her beat it. How'd you work it, Algy?"

"Easiest thing, you know," said Algernon between gasps of joy. "I held her up for a while pretendin' I was deaf, and then I let her get at the 'phone, you know, with *me* on the extension behind the desk. She called her number and asked if it was Wakefield & Smith, and then asked for the shippin' department, and Toodles' real name is Mr. Button. What you know about that? Say, he has my sympathy, too. He was fussed to death bein' held up with that line of talk, at the works, you know, but tryin' to hand the

girl a line of salve, too. When I thought it had gone far enough I put in a deep voice, and sez I:

"Here, here, this is Mr. Smith. This wire is for business, and our young men have got to attend to business in business hours.' Then you ought to heard two phones slam up in a hurry. Oh, gee, it was a scream!"

"Algernon," said Clarence, with a great show of emotion, "if ever I held an unjust thought of you I repent. Come and let me imprint a chaste kiss on your brow. I take off my hat to you. You are pure class! You are the smoothest little piece of machinery I ever saw."

"I certainly am all to the mustard," acknowledged Algernon, with becoming modesty. "I expect to get my salary raised for this. Give us a mint cocktail, old man."

BOARD QUESTIONS ANSWERED

AN ILLINOIS EXAMINATION.

PRESCRIPTIONS.

(Continued from June BULLETIN.)

No. 1702.

FOR MISS FULLER.

R Tinct. ferri chlor.....f5ii.
Ammonii carb. q. s.
Acidi acetici dil.....f5ii.
Glycerini5ii.

M. ft. Sol.

S.: Coch parvulum t. i. d.

Oct. 2, 1907.

DR. BLANK.

Nearly neutralize the acetic acid with ammonium carbonate and carefully avoid an excess. This leaves the reaction slightly acid. Then add the glycerin and then the iron. The ammonium carbonate and acetic acid give a strong spirit of mindererus. The solution is similar to Basham's mixture.

No. 1703.

FOR MR. LONG.

R Sapo,
Opiumää 20 grains.

M. ft. pil. s.

S.: One when required.

Nov. 1, 1907.

DR. BLANK.

Two and a half grains are a large dose of opium. One grain is the average. The Pharmacopœia directs soap and water as excipients.

Syrup or glucose also makes a good pill of opium.

No. 1704.

FOR JOHN DOE.

℞ Fluidextract of buchu.....1 fluidrachm.
Aqueæ2 fluidounces.
Sodii salicylatis2 drachms.

M. ft. solutio.

Signæ.: As directed.

Oct. 5, 1907.

DR. BLANK.

Fluidextract of buchu is a resinous drug and is soluble in aqueous concentrated solution of sodium salicylate. It is not soluble in water or in weak solution. For this reason the fluidextract and the sodium salicylate should be mixed and the water gradually added. If mixed in opposite order clots of resin will separate out.

No. 1803.

FOR MR. FRANCIS.

℞ Acidi borici,
Zinci sulph.ää 1.320.
Aqua dest.60.

M. ft. collyrium.

S.: Eye water.

Nov. 7, 1908.

DR. BROWN.

Use warm water to dissolve the boric acid. Then dissolve the zinc sulphate and filter carefully.

No. 1804.

FOR DOROTHY.

℞ Opii,
Plumbi acetatis,
Acidi tannici,
Ext. belladonnæää 64.
Adeps lanæ hydros.....1280.

M. ft. ungu.

S.: Apply as directed.

Dec. 1, 1908.

DR. BLANK.

The extract of belladonna should be made into a paste with dilute alcohol and the paste mixed with some of the wool-fat. The tannic acid should be dissolved in a small amount of water and likewise mixed with another portion of the wool-fat. The lead acetate should be dissolved in a few drops of water, or reduced to the finest powder, and it and the opium each separately mixed with portions of the wool-fat. The four separate ointments should then be combined to form one smooth homogeneous ointment containing all the ingredients. The finished product should be a perfectly smooth greenish-brown ointment free from lumps or grit.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THE POSSIBILITIES OF THE SPICE BUSINESS.

To the Editors:

It is to be regretted the druggists throughout the country have neglected the greatest trade-getter easily within their reach—the spice trade.

In July and August I sent out over 500 circular letters to people selected from my mailing list. In each I enclosed 1 drachm of Saigon cinnamon. The sample was put up in a waxed powder paper sealed in a coin

O. W. WINKELPLECK,

DRUGGIST.

SUGARCREEK, OHIO.

WHERE TO BUY SPICES, AND WHY.

It will take you about three minutes to read this and, take my word for it, it will be the most profitable three minutes you ever spent.

SPICES are articles that should have special attention when buying. You should be quite sure they are not only pure but up to the standard STRENGTH as required by the Government Standard.

You may not know DRUGGISTS carry such articles as mentioned below. You may be one that thinks all SPICES are alike, and have been buying all such articles in fancy tin or paper packages put up by some Tea Company or Spice Grinder. There may be someone in them for you to get a premium sometime. Well!

Do not forget you are paying for all fancy packages and premiums. If you will buy your SPICES in BULK, and premiums separate, you will save 25 cent on every dollar. And further, how do you know anything about the STRENGTH? In fact you are not in a position to know, neither does the party who sells them. No doubt but the packages bear the word "Pure." No doubt they are. But don't be deceived by this word "Pure." They may be pure but very deficient in strength.

Why are the BEST SPICES sold in Drug Stores? How is it in plain truth.

All drugs (spices are classed as drugs) must be of a certain standard of strength as well as pure. Such SPICES as Cinnamon, Cloves, Allspice, Mace, are used in compounding medicines, either for their cumulative power or used to disguise medicines which are unpleasant to take.

All drugs or SPICES must have a certain strength, and this standard of strength is fixed by the Government, which is published in a book called the United States Pharmacopoeia. This book is the basis of Pharmacy and a guide to all drug establishments, either Drug Stores, Manufacturers, Wholesale or Retail. This standard of strength is COMPLIED with by the drug trade and therefore you can readily see why the BEST SPICES are sold by druggists. The same will apply to Flavoring Extracts, such as Vanilla, Orange, Lemon, etc.

Another reason why the BEST SPICES are sold in drug stores. The best and choicest spices are imported by the drug importers for the retail trade. This is the source of supply for the retail druggists. Before they are sent out by importers or drug grinders they are all analyzed or tested for STRENGTH and PURITY as required, and each and every bulk package must bear the U. S. P. label, showing they are up to all requirements.

Such spices that are below the standard in strength and not fit for drug purposes are put up in fancy packages and sold for culinary purposes and table use, the package knowing druggists will not buy them for compounding medicines.

The spice trade to the druggist is like the farmer as to what he raises. HE GETS FIRST CHOICE. Every pound of spice I buy comes from the BEST HOUSE in the United States. They are all analyzed and are positively what I represent them to be. They are BETTER, CHEAPER, ALWAYS SATISFACTORY and can be DEPENDED UPON.

I am enclosing you a sample of Cinnamon for you to try and to note the difference between this HIGH GRADE CINNAMON and the ordinary article which is generally sold in packages.

The others mentioned below are of the HIGH GRADE QUALITY.

Allspice	Pepper (Red)
Clove	Pepper (Black)
Ginger	Thyme
Mace	Turmeric
Mustard	Mixed Spices, Whole (for pickling)
Nutmeg	Coriander
Sage	Anise

One of Mr. Winkelpleck's circulars.

envelope. On the envelope I had printed: "A Sample of Cinnamon, Pure and Strong. Try it, nothing like it." Then followed my name and address.

I was surprised at the results. I had many tell me they were glad to know where they could get good spices. Most of them came in and asked for cinnamon. Then it was up to me to call their attention to the other products

of the kind which I had. Nine times out of ten I sold them cloves, mustard, nutmeg, etc.

I had bought the best I could get. Quality came first, price afterwards. But I charged accordingly. I made a better profit than I could on cheap stuff and satisfied my customers.

If every druggist throughout the country would do as I have done, it would be but a few years before the spice business would be back in the drug store where it belongs. This line of trade should be an eye-opener to the druggist who has cut prices to compete with. Instead of watching what the other fellow is

it, and regret it, and wish it could be better. Yet lo and behold! Here is a gentleman from Connecticut who, like the convict we now and then hear about, refuses his freedom when he might have it.

Why, Mr. Bennett even *acknowledges*—*admits*, mind you, brethren!—that the national pure food law and the anti-narcotic laws of the various States are of some use, and these are the laws that the most prominent men in our profession, our State and national associations, have been fighting for during the last ten years.

Mr. Bennett asks us to imagine what would happen if the sixty-hour-a-week law became effective throughout the United States. All that I can say is this: I don't know of any one thing that would be of greater benefit to the profession at large than that this law become effective throughout the United States.

Let us suppose that the average druggist in the United States works, as Mr. Bennett says, only 100 hours a week. Only 100 hours out of a possible 168! Fifteen hours a day for seven days a week. Surely a light day's work for any man! Only double the hours that our masons and boilermakers work. Only double the hours and at half the pay! But, gentlemen, think of the terrific mental strain that the average painter or plumber works under. Did you ever notice it? Of course it requires no presence of mind to wait on a few soda customers and paint customers and stamp customers and to try to put up a few prescriptions in the meantime.

But then, as Mr. Bennett says, the average clerk has many a minute in which he may relax, say in the evening, for instance, when the wall-paper and soda trade is dull. He may even stand at the front of the store and watch his friends go by on their way to a good time, much like a G. A. R. vet. who is unable to march on Decoration Day and can only watch the parade.

I claim that the 60-hour bill would be a benefit, not a burden, to every druggist in the land. It is not the public that forces the druggist to keep open fifteen hours a day or longer. It is the druggist's own mistaken idea of what the public wants. The public has supported, willingly, any effort to shorten the hours of labor of the druggist. We tried a closing plan in our own city, closing at 8 P.M. We found it worked well, caused no

O. W. WINKELPLECK,

DRUGGIST,
SUGARCREEK, OHIO.

True Extract of Vanilla.

I am enclosing you a sample (one teaspoonful) Extract of Vanilla for a trial, and to demonstrate to you the HIGH GRADE VANILLA I carry regular in stock. Compare it to the ordinary Extract of Vanilla or Vanillin, whichever you may have, and notice the rich, pleasing flavor it has. Use a little less of this than the kind you have been using. It is made from true Mexican Vanilla Beans, without artificial flavor or coloring.

Imitation Vanilla.

In past years people have been deceived more with Extract of Vanilla than any other flavoring extract.

Before the Pure Food and Drug Law was passed the imitation Vanilla (now called Vanillin) was all called Essence or Extract of Vanilla. But since the passage of this law it is put out under a dozen or more different names, such as, Vanillin Flavoring, Compound Tincture Vanillin, Compound Essence of Vanillin, Vanillin Flavoring (synthetic), Vanillin Flavor (imitation), Extract of Vanillin (no alcohol), and many others.

The stuff as put up under such names is made from Vanillin and Coumarin; these are made from Cou-Tee. They are dissolved in water, to which has been added Potash (lye), then colored with burnt sugar (caramel). The cost to make a gallon of this is about 60 cents.

This is where you get the big bottle for 10 or 25 cents, usually put up in a fancy package. This imitation Vanilla will get rancid by age and unfit for use, while the True Extract Vanilla will improve by age.

After you have used this sample of True Extract of Vanilla, which I am enclosing herewith, you will readily see the difference.

THIS IS THE KIND THAT I USE. THE KIND YOU OUGHT TO USE.

QUALITY! PURITY! STRENGTH! ECONOMY!

Another circular.

doing in the way of reducing prices, let him cut loose along these lines. In a short time he will have people coming to his store who have never dealt with him.

Not only will it do this, but it will elevate the standard of his store and thus gain the confidence of his trade for other lines of business.

O. W. WINKELPLECK.

Sugarcreek, Ohio.

HE BELIEVES IN THE TEN-HOUR DAY.

To the Editors:

On page 212 of the BULLETIN for May appears a letter by Burton L. Bennett on the subject of "The Ten-hour Day," upon which I wish to make the following comments:

Most of us realize how long our working hours are in the drug business. We realize that on one pretext or another we work about double the time that we ought to. We realize

loss of business, and we heard not one complaint from a customer. The 60-hour-a-week law would force the stores to close or have two shifts of clerks. In nearly all instances two shifts of clerks would be unprofitable. Therefore it would make absolutely necessary some harmonious arrangement in regard to closing.

The idea that a druggist must stay open to dispense medicine is wrong. Aren't people just as apt to be taken sick at 3 A.M. as at any other time? They can't get into a drug store then. If a person is sick enough to need medicine at that hour of the night or any other hour that the drug store is closed, he is sick enough to call a physician.

Mr. Bennett says that the hours of a clerk should be a matter of adjustment between the clerks and the proprietor. I know of a case in which the proprietor of a chain of several drug stores threatened to discharge any clerk of his who joined a drug club that was fighting for twelve hours a day! Here, again, this law would have forced harmony or would have forced the man to put on two shifts, which I am sure would have been unprofitable. Mind you, I don't say all employers are that way—I for one am not—but I know there are enough of them to force the rest of us to keep open.

I sincerely hope that every druggist—employer and employee—will fight for, not against, this bill wherever and whenever it appears.

F. C. BEHLING.

Janesville, Wis.

WE ARE DISCIPLINED.

To the Editors:

You ask, regarding the change in the BULLETIN cover: How do you like me in my new summer dress?

I don't! Heine says: "Melancholy, thy name is calico!" and that is the way I feel about your calico outfit. Don't blush—I am in love with you, worship the ground, etc. No, that's going too swift—but I cling to the *old and tried*—and follow Goethe's "And custom he calls his nurse." The Interno of the BULLETIN is so excellent—why bother about the Externo? Would you not feel shocked to see Abe Lincoln in a pair of Kit Alexander gloves, desecrating the hand that wrote the Emancipation Proclamation, by the flimsy, flippy rule of Dame Fashion?

No, Harry, the old was so dear to me that I shall miss the accustomed dear old cover.

Chicago, Ill.

WILHELM BODEMANN.

To the Editors:

It is always a question as to whether we like our old friends best in their old clothes, or when they come out with a brand-new suit. When opening my mail this morning I had to look twice in order to recognize my old friend clothed in a new dress. At first I confess to my disappointment in its appearance, but as the day proceeds I begin to like it better, and possibly by the time the next issue comes in, I will have become reconciled to the marked change in its appearance. However, the *inside* of a book is what counts, and I never peruse the pages of the BULLETIN without finding something live, interesting, and instructive.

St. Louis, Mo.

L. G. BLAKESLEE.

To the Editors:

Compliments on your new summer suit for the BULLETIN! I am favorably impressed—although when the cover popped out at me first from the wrapper I thought I was color blind for the moment. The new suit is a hummer—but the "inside" beats it a mile!

Gridley, Ill.

J. EARL TAYLOR.

To the Editors:

Allow us to congratulate you on your new dress. We think it is a decided artistic improvement!

THE BURGESS DRUG CO.

Boulder, Colo.

CYANIDES OR PTOMAINES?

To the Editors:

In your April, 1911, issue there is an editorial with the caption "Cyanides or Ptomaines—Which?"

Your remarks about potassium cyanide causing a great many cases of so-called "ptomaine poisoning" may be in part correct. However I beg to state that I have been collecting ptomaine poisoning statistics for a number of years and have not heard of one case being caused by coffee on account of the coffee-pot having been cleaned with powder containing potassium cyanide; nor do many of the cases occur in hotels. Such cases frequently occur at church festivals when the ice-cream has been made in a freezer which has not been thoroughly cleansed, thus enabling poisonous bacteria to propagate unmo-

lest in the crevices of the can, and on the paddle which stirs the cream.

The majority of such cases occur, however, from eating canned meats which have been left in the can, exposed to the action of the atmosphere. They come, too, from sausage, fish, etc., not properly preserved.

Prior to the enactment of the food and drugs act, ptomaine poisoning cases were not as frequent as they have been since the enactment of this law. According to statistics, there were 34 cases of ptomaine poisoning, nine of which were fatal, in the United States during the months of July, August, September, and October, 1906. During the year 1906 boron preservatives were used on flesh, fish, fowl, and oysters. During the same period in 1907 there were 1906 cases of ptomaine poisoning, 58 of which were fatal. The law enforced in 1907 prohibited the use of boron preservatives. The foregoing data show an increase of over 5600 per cent in the number of cases of ptomaine poisoning and over 500 per cent in the number of deaths. There is no question whatever but what this enormous increase was caused by partaking of foods not properly preserved.

Since the enforcement of the food and drugs act there have been 22,741 cases of ptomaine poisoning, 1012 of which were fatal. The reports from which these statistics are obtained are as accurate as possible. It is true that some of the cases reported in the press may often be due to acute indigestion, caused by the impure food ingested. There have been in this period, however, thousands and thousands of cases which were not reported in the press, and which will more than offset any inaccuracies in the foregoing statistics. To prevent such cases it is absolutely essential to use a preservative with sufficient antiseptic properties to prevent the propagation of poisonous bacteria, and the public should be warned through the press of the necessity of removing canned goods from the can and consuming them as soon as possible thereafter.

New York.

H. L. HARRIS, Publicist.

OLD JOURNALS WANTED.

To the Editors:

On April 18 of this year I addressed a communication to various pharmaceutical publications informing them that the disastrous fire

in the Capitol building on March 29 had destroyed our educational records and left me without access to the volumes of these journals. A very generous response to that letter has afforded a quite complete file of different periodicals. I take advantage of these gifts to enter on the task of completing the files and paving the way for a State pharmaceutical library of a complete and educational character. I would take advantage of your columns to ask from time to time for such numbers of different journals as we need. For the present let me ask if any of your readers can supply us with the following copies of *Merck's Report*: Volume 14, No. 1; Volume 15, No. 6; Volume 18, Nos. 6 and 7.

H. L. TAYLOR,

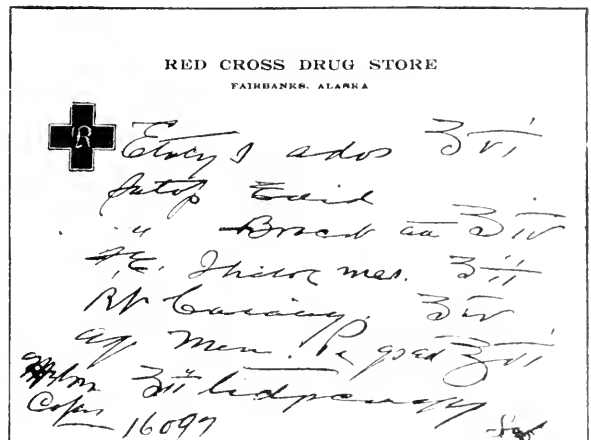
Secretary Pharmaceutical Syllabus Committee.

State Normal College, Albany, N. Y.

THE PRESCRIPTION INTERPRETED.

To the Editors:

On page 215 of the May BULLETIN I observe the reproduction of a prescription sent



in for interpretation by E. A. Mitchell. My interpretation is as follows:

Sodium salicylate.....	6 drachms.
Potassium iodide.....	4 drachms.
Potassium bicarbonate.....	4 drachms.
Fluidextract of colchicum.....	2 drachms.
Tincture of guaiac.....	4 drachms.
Peppermint water, enough to	
make	6 ounces.

Mix and take two teaspoonfuls three times a day after meals.

DR. BURROUGHS,

Des Moines, Iowa. of the Standard Chemical Co.

To the Editors:

The prescription from E. A. Mitchell, Van-

couver, B. C., in the May BULLETIN when interpreted would read as follows:

Sodium salicylate6 drachms.
 Potassium iodide4 drachms.
 Potassium bicarbonate4 drachms.
 Fluidextract colchicum seed....2 drachms.
 Tincture guaiac4 drachms.
 Peppermint water, to make.....6 ounces.

Two teaspoonfuls three times daily in water after eating.

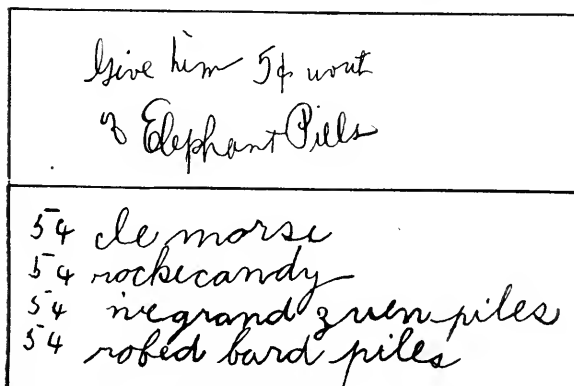
I was called upon by an attorney one time to interpret a letter. It had been written by a married man to another man's wife and had been intercepted by the authorities. This was written the same way as the prescription; so when I get hold of anything puzzling like that I always look for reversed words.

J. G. ANDERSON,
 Wadena, Minn. of Anderson & Stedman.

TWO OR THREE GOOD SPECIMENS.

To the Editors:

I am sending you some customers' orders which deserve a place in your column of curios. No. 1 represented a newly coined



name for Alophen Pills. No. 2 called for Irish moss, rock candy, quinine pills, and rhubarb pills.

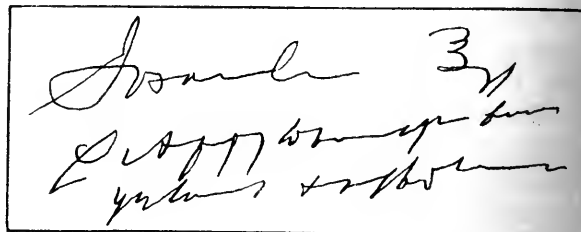
MEYER TUMAN, PH.G.
 Brooklyn, N. Y.

HE DOESN'T AGREE WITH MR. RAUBENHEIMER.

To the Editors:

Last December you very kindly reproduced a prescription which I submitted to you to be deciphered. I have just noticed that among other interpretations, one appeared from Mr. Raubenheimer in the February BULLETIN. I would not care to be in the poor pill-roller's

shoes who dispensed formalin on this prescription! I have filled this particular prescription a number of times and am quite fa-



miliar with it. It calls for Iosaline 2 ounces, and the directions are as follows: "Apply to knee after bath 1/2 hour and at bedtime."

R. T. O.

"DECOLORIZING" TINCTURE OF IODINE.

To the Editors:

I notice on page 219 of the May BULLETIN a query entitled "Decolorizing Tincture of Iodine."

Our method is a quick one. We shake the U. S. P. tincture with sodium hyposulphite, using about two ounces to the pint, although I have never made an exact weighing of the hyposulphite. Five to ten minutes' shaking will yield a colorless product—not a real tincture, however, for I admit the resulting preparation is most likely a solution of sodium iodide.

EMIL REYER.

South Bend, Ind.

To the Editors:

I would thank you to renew my subscription to your most estimable publication. Each number is full of interesting, meaty articles, and I am sure the subscribers of your journal find the time spent in reading it both interesting and profitable. Your Dollar Ideas are always good—and so is everything else in the BULLETIN!

W. A. MADDEN.

Santa Clara, Cal.

* * *

To the Editors:

Since my earliest apprenticeship days I have always been an ardent student of the BULLETIN. I have gained more real practical knowledge from the BULLETIN than from all the other journals combined.

New Orleans, La.

H. CUSTER NAYLOR.

THE SODA FOUNTAIN.

SOME SUGGESTIONS.

By OLLIE MILLER,

Soda Dispenser at the Gray & Worcester Fountain, Detroit, Mich.

I am in favor of offering the employees some kind of inducements to encourage better effort. For example:

Arrange the check system so that each man can show what he is doing. Then offer a prize to the one turning in the most checks each week. You will find the help will all be on the job.

Arrange a breakage system. Impose a 5-cent fine for each article broken. At the end of the week let the one who has broken the least get it all. Each man has a chance, and every one will be careful.

Give each man an afternoon off each week to see the game. The force will work all the harder for the firm.

Give the head men on the shifts some privileges over the others. That will make the others work harder and try to reach the top of the ladder.

TEN-CENT SODAS.

I have been asked my opinion of the ten-cent soda which has been the talk of Detroit for the past two years. The proprietors have consulted one another about this, and if you meet one on the street and ask him what is the news he will say: "Well, we are all willing to charge ten cents for sodas except Mr. —."

In other cities, large and small dealers have successfully charged 10 cents for sodas. Why not all of us? No doubt the one contestant is doing all the business he can. Else he could not oppose the movement. And if the others would go ahead, it would not be long before Mr. Holdout would come in. The others would be serving finer soda. The public would see the difference, and in a short time the public would demand 10-cent sodas.

The cry is the business would drop off. Even if it were to drop off half, the receipts would be just as much as the sale of 5-cent sodas, and the profit is much greater on a 10-cent soda than on two 5-cent sodas. The help, too, could be cut down, and the soda-fountain expenses in general could be lessened until the public would get accustomed to these prices.

FANCY NUT SUNDAES.

Besides the nut sundaes which are prepared from dressings, of which nuts are one of the component parts, there are many fancy dishes prepared from ice cream, by the use of nuts in combination with other dressings, or by the use of dressings containing nut meats, combining them in various ways with other dressings, etc. This method of serving ice cream is one of the most popular to-day, and in view of the fact that it has been discovered within recent years that nuts are of exceptional food value, these combinations undoubtedly furnish one of the most substantial

dishes served in ice-cream parlors and at soda fountains. Here are several formulas of the kind suggested by the *International Confectioner*:

AUSTRALIAN SUNDAE.

Put a No. 10 cone of two kinds of ice cream into a sundae cup and pour over it a little raspberry syrup; sprinkle with chopped mixed nut meats, and top with a maraschino cherry.

BACHELOR SUNDAE.

Put a No. 12 cone of vanilla ice cream and one of chocolate ice cream into an oblong dish. Over the vanilla cream pour a ladle of the following dressing: Take one pound of hickory nut meats and grind them fine. Add one pint of sweet cream and one-half pound of sugar, and bring the mixture to a boil. Then add two heaping spoonfuls of marshmallow whip. Keep in a cool place. Over the chocolate cream pour a ladle of the following: Prepare the same as before, only use one pound of raisins instead of the nut meats. Top with whipped cream and stuffed raisins.

STUFFED RAISINS.

These are prepared by removing the seeds and filling the raisins with finely ground hickory or other nut meats.

BILLIKEN SUNDAE.

Put a No. 8 cone of vanilla ice cream into a sundae cup. Crown with a maraschino cherry. In the top of the cone stick some broken walnut halves so as to make a circle around the cherry. Over this pour some chocolate syrup.

BOSTON NUT SUNDAE.

Cut a slice of peeled orange into sections. Cut a slice of Hawaiian pineapple into small triangles. Put a No. 8 cone of vanilla ice cream into sundae cup, and arrange the fruit, cuts, and whole of English walnut meats artistically around the cone, and top with a maraschino cherry.

CHERRY GRAPE SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup. Sprinkle with chopped walnut meats, then pour over the cone equal portions of grape and sherbet syrup. Top with whipped cream, and crown with a maraschino cherry.

CHERRY PECAN SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup and arrange a row of candied cherries around the base. Above this, place a row of pecan halves. Top with whipped cream, and sprinkle with chopped pecan meat. This may be varied by running rows of cherries and pecans up and down the sides of the cone.

PLAIN NUT SUNDAE.

Put a No. 10 cone, or mound, of ice cream in a sundae cup, and sprinkle with chopped nut meats of any desired kind.

ENGLISH WALNUT SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup. Put a row of walnut halves around the cone of cream until it is covered, and place on the top either a fresh candied or a maraschino cherry.

HICKORY NUT, PECAN, AND ALMOND SUNDAE.

This is prepared in the same manner as the English walnut sundae, only using the specified nut meats.

COMBINATION NUT SUNDAE.

This may be prepared from any two kinds of nuts. For example, a pecan almond sundae is prepared by first placing a row of pecans, and then one of almonds, around the cone, and so on until it is covered, crowning it with a cherry.

CINNAMON PEAK SUNDAE.

Put a No. 8 cone of vanilla ice cream into a sundae cup, and sprinkle with powdered cinnamon. Cover the cone with mixed chopped nut meats and top with a little whipped cream and a maraschino cherry.

CLEVELAND CHOCOLATE SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup, and sprinkle with chopped nut meats. Around the base place three or four slices of orange. Top with whipped cream, and crown with a maraschino cherry.

CONNECTICUT NUT SUNDAE.

Put a No. 10 cone of ice cream into a sundae cup and sprinkle with a little powdered nutmeg and cover with chopped nut meats. Top with a little whipped cream, and drop a few pistachio nuts into the cream.

DUNCE CAP SUNDAE.

Put a No. 10 mound of ice cream into a sundae cup; pour over it a ladle of any desired crushed fruits, and sprinkle with chopped nut meats. Fill a small ice-cream cone with whipped cream, and invert it on the mound of ice cream.

GRAPE FLOAT SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup, and pour over it one-half ounce of ice-cold grape juice. Then sprinkle with chopped walnuts or other chopped nut meats, and crown with a maraschino cherry.

ITALIAN SUNDAE.

Put a No. 10 cone of strawberry and chocolate ice cream into a sundae cup. Over this pour a ladle of chop suey dressing. Top with whipped cream, and crown with a large, fresh strawberry.

JOSEPH'S COAT.

Put a No. 10 cone of vanilla, strawberry, and chocolate ice cream into a sundae cup, or fruit nappie. Slice one-half banana around the base. Next place a row of maraschino cherries. Above this arrange a row of Hawaiian pineapple cut in small V-shaped pieces. Cover the top of the cone with assorted nuts, and top with a maraschino cherry.

LONE STAR SUNDAE.

Put a No. 8 cone of vanilla ice cream in a sundae cup. Over this pour some chocolate syrup, and then cover with a mixture of pecans, almonds, and dates, chopped together.

FIG-NUT SUNDAE.

Put a No. 10 cone of vanilla ice cream into a sundae cup, and pour over it a little fig-dressing, sprinkle with chopped walnuts, and top with whipped cream. A walnut fig dressing may be used.

POPULAR SODA FOUNTAIN BEVERAGES.

APOLLINARIS FIZZ.

Orange syrup1 fluidounce.
Strawberry syrup1 fluidounce.
Lemon juice1 fluidounce.
Cracked ice¼ glassful.
Apollinaris water to fill a 12-ounce glass.

Mix and serve with straws.

GRAPE PUNCH.

Put 1 ounce of orange syrup into an 8-ounce glass, add the juice of half a lemon, half an ounce of grape juice, a small amount of ice, and fill the glass with the coarse stream of carbonated water.

HAZELNUT ICE CREAM.

Roast 5 ounces of hazelnuts to a light brown, then remove the skins, which may be done by rubbing in a towel and subsequent sifting. Then make a pulp of the nuts by rubbing them in a mortar with milk. Heat one gallon of cream with two pounds of sugar, and just before the mixture comes to a boil add the nut paste and the yolks of 12 eggs, the latter being previously beaten up with some cream. Pass all through a fine sieve and freeze in the usual manner.

MARSHMALLOW DELIGHT.

Ice¼ glassful.
Almond syrup1 fluidounce.
Raspberry syrup1 fluidounce.
Egg1.
Milk, to fill a 12-ounce glass.

Shake, strain, and fill the glass with carbonated water.

MILK AND SELTZER.

In serving this drink, fill half the glass with the coarse stream of carbonated water, then fill with milk. Do not reverse the process as too much foam will be produced.

MILK SHERBET.

Strawberry syrup1 fluidounce.
Pineapple syrup1 fluidounce.
Vanilla syrup1 fluidounce.
Shaved or cracked ice½ glassful.
Milk, to nearly fill a 12-ounce glass.

Shake well, strain into a 12-ounce glass, fill the latter with the fine stream of carbonated water, and serve with straws.

NIAGARA MIST SYRUP.

Strawberry extract1 fluidrachm.
Vanilla extract2 fluidrachms.
Cream1 pint.
Soda syrup2 pints.

Serve like other soda syrups, or with cream or ice cream.

ORIENTAL NECTAR.

Sherbet syrup1 fluidounce.
Red orange syrup½ fluidounce.

Fill an 8-ounce glass half full of crushed or shaved ice, add the above syrups, fill the glass with coarse stream of carbonated water, stir well, and serve with straws.

ROSE TULIP PEACH.

Rose syrup6 fluidrachms.
Pineapple syrup4 fluidrachms.
Orange syrup4 fluidrachms.
Cream4 fluidounces.
Cracked ice¼ glassful.

Shake, strain into a 12-ounce glass, nearly fill the latter with the coarse stream of carbonated water, finish with the fine stream, and top with whipped cream.

COFFEE FRAPPE.

Coffee syrup2 fluidounces.
Vanilla syrup4 fluidrachms.
Cream2 ounces.
Cracked ice¼ glassful.

Shake with about 8 ounces of plain water, strain into a 12-ounce glass, and fill the latter with the fine stream of carbonated water.

DERBY WINNER.

Into a 12-ounce glass draw 2 ounces of orange syrup. Into this break an egg and add 1 ounce of

cream, about a tablespoonful of port wine, and some finely shaved ice. Shake thoroughly and fill with carbonated water as directed for egg drinks. Strain into a glass and serve.

COFFEE NUT SUNDAE.

Walnuts	4 av. ounces.
Hickory nuts	2 av. ounces.
Almonds	2 av. ounces.
Filberts	2 av. ounces.

Mix, chop into small pieces, and mix with a suitable amount of coffee syrup. Serve this like other sundaes. The latter may be topped with whipped cream.

CREAM SHAKE.

Cream	2 fluidounces.
Chocolate syrup	1 fluidounce.
Orange syrup	4 fluidrachms.

Fill a 12-ounce glass one-fourth with cracked ice, add the syrups and cream, and enough milk to fill the glass. Shake well, strain, and serve with straws.

RASPBERRY DASH.

Raspberry syrup	1 fluidounce.
Cream	1 fluidounce.
Tincture Jamaica ginger	1 dash.
"Acid phosphate"	1 dash.
Cracked ice, a small piece.	
Egg	1.

Mix all with about 4 fluidounces of water, shake well, strain into a 12-ounce glass, and fill the latter with the fine stream. Serve with straws.

EGG ORANGE MALTED MILK.

Orange syrup	4 fluidrachms.
Plain water, or milk	4 fluidounces.
Cracked ice, a small piece.	
Egg	1.
Malted milk	1 tablespoonful.

Shake vigorously, strain into a 12-ounce glass, nearly fill the latter with the coarse stream of carbonated water, and finish with the fine stream.

FRUIT AND NUT DRESSINGS FOR SUNDAES.

The *International Confectioner* recently published several formulas for fruit and nut dressings that are used in sundaes. We are pleased to print several of them, as follows:

FIG-NUT DRESSING.

Run eight ounces of figs through a fruit chopper, add one pint of simple syrup, and bring to a boil. Allow this to simmer for a few minutes, until the figs are soft. When cold, add eight ounces of mixed chopped nut meats. If too heavy, reduce to a working consistency with a simple syrup. Fig-nut dressing is also very nice when prepared with maple syrup. The figs may be incorporated with the syrup without cooking, if desired; but it does not make, to our mind, as rich a dressing. In serving, top with whipped cream.

PECAN FIG DRESSING.

Run one pound of figs through a fruit chopper, and add one-half gallon of maple syrup. Add one-half pound of pecan nut meats chopped fine, and boil for fifteen minutes. When cold, add enough lemon to flavor the mixture nicely.

CENTRAL FRUIT DRESSING.

Run one pound of English walnuts and one pound of pecan nut meats through a fruit chopper with one-fourth pound of powdered sugar, using the fine cutter. Dilute to a working consistency with simple syrup. This may be colored pink, if desired.

NABISCO NUT DRESSING.

Grind one-half pound of pecans, add with one pound of sugar to a quart of heavy cream, and heat to the

boiling point. When cold, add one-half ounce of vanilla extract and eight ounces of crushed pineapple. Four ounces of marshmallow whip can be used in place of the vanilla, and this produces a fine dressing.

TWO EXCELLENT ADS.

Wm. A. Chamberlin, of Collingwood, New Jersey, issues a weekly bulletin, a little store paper covering news of his pharmacy. We are reproducing two of the




ATTENTION
All Ye Lovers of
FINE SODA

WOULD YOU ENJOY something exquisitely luscious? Do you crave a drink of soda water that is the acme of perfection in deliciousness, in freshness and in purity and wholesomeness?
THEN LOSE NO TIME in visiting our store and regaling yourself with your favorite drink from the many tasty soda delights we are now serving to the enthusiastic enjoyment of our thirsty patrons.
SODA-LOVING FOLKS of all ages and both sexes are hereby notified that the "1911 Soda Sension" is well under way at our fountain; now watch the crowds come flocking here for our better-than-ever soda water.

OF QUALITY

John Ruskin said: "All works of **QUALITY** must bear a **PRICE** in proportion to the skill, time, expense and risk attending their invention and manufacture."
"Those things called dear are, when justly estimated, the cheapest; they are attended with much less profit to the artist than those things which everybody calls cheap."
"Beautiful forms and compositions are not made by choice, nor can they ever, in any material, be made at small expense."
"A competition for **CHEAPNESS**, and not for **EXCELLENCE** of workmanship, is the most frequent and certain cause for the rapid decay and entire destruction of arts and manufacture."

ads. that appeared in Mr. Chamberlin's publication. They are above the average and will be found useful by our readers.

A RETAIL DRUGGIST USES BILL POSTERS.

One of the most unique ads. that has come to our attention in a long time is being used by B. S. Cooban & Co. of Chicago. It is a large bill-board poster 23

COOBAN'S
CRUSHED
STRAWBERRY
ICE CREAM SODA and SUNDAE
22% Cream, Sugar and Vanilla
TOPPED OFF WITH
FRESH STRAWBERRY
B. S. COOBAN & CO.
DRUGGISTS
459 W. 63d Street, cor. Normal Boulevard

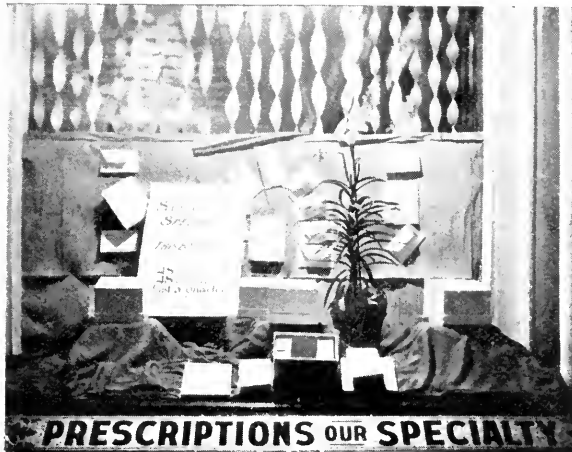
inches wide and 3½ feet high. The paper is white, the lettering being done in red and blue. This ad. was presumably posted on all the bill-boards in the neighborhoods that contribute to the Cooban store.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Two Interesting Window Displays.—

James L. McAnlis, Ph.G., manager of the Physicians' Pharmacy Co., Youngstown, Ohio, is particularly



interested in the subject of window trimming. He sends us two displays recently exhibited in his windows, and both of them are characterized by simplicity and effectiveness. Mr. McAnlis remarks that druggists as a rule do not pay sufficient attention to window trim-



ming and card writing. In his judgment this division of the business has been very much neglected, except among the larger stores in the cities, where regular trimmers are employed.

Baby Supplies in the Window.—

An original display of nursery supplies appeared in the window of J. F. McCreery, of Fonda, Iowa, having been arranged by G. W. Lyman.

In the center of the window stood a "stork," or

rather a sand-hill crane that had been mounted. Hanging from its beak was a sling in which rested a baby doll. The picture of a child was placed behind the bird, while two pictures of a baby were suspended from above.

The floor was covered with talcum powder, castoria, nipples, milk bottles, and other things a baby might



need. To the left appeared a sign: "Give the little suckers a chance."

The display did the store some good.

Duplicate Prescription Blanks.—

The prescription pads distributed by R. W. Love, of Saskatoon, Sask., among the doctors in his vicinity are quite a departure from the style usually adopted for

G. R. PETERSON, M.D.	
Office: MacBeth Block, Phone 255	
Date.....	OFFICE HOURS { 9 to 11 a.m.; 3 to 6 p.m.; 7 to 8 p.m.
For	Residence: 23d St., East of 5th Ave., House Phone 326
Address	
Diagnosis	For.....
Treatment	R.....

such stationery. Each blank is perforated, dividing it into two sections. The doctor writes the prescription on one half, retaining the other as a record of the case.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Compressed Tablets.—

H. E. Ives says that the firefly has a light efficiency 20 to 25 times as great as an electric arc light.

Professor Arrhenius calculates that a decrease of 50 per cent of the carbon dioxide in the atmosphere would give the temperature of the glacial period.

Mr. J. Liddell says that "any bosh-cooled pig is likely to contain moisture"—but he is talking about pig copper!

Alcohol vapor at a pressure of $\frac{1}{3}$ to $\frac{1}{2}$ atmosphere will destroy the enzymes in leaves in from one to two minutes.

Malt extract inverts cane sugar, but the action is very slow, occupying five to six months or more.

The liver contains an enzyme which oxidizes alcohol to acetic acid, then to carbon dioxide and water. The liver of man contains less of this enzyme than that of some animals.

A patented washing compound in the market in England, consists of 35 per cent sodium perborate, 45 per cent paraffin, and 20 per cent stearic acid.

By biological tests, one part of soap-tree bark in 400,000 can be detected.

Professor Hatcher says that *Cactus grandiflorus* does not possess any pharmacological action and is useless as a medicine.

R. C. Cowley says that ammoniocitrate of iron is really ammonium ferrocitrate—the iron being in the acidic condition.

Dr. G. H. Clark says that chloroform in repeated small doses, if long continued, lowers the vitality of the tissues and is a much more dangerous drug than when given in single and large doses.

F. Hart thinks that fossil wood is formed by the absorption of clay in water-suspension, which then decomposes into alumina and silica in the woody fibers and so petrifies the latter.

Two wise men say that liquid water is a ternary mixture of steam, water, and ice molecules— H_2O , $(\text{N}_2\text{O})_2$, and $(\text{H}_2\text{O})_3$.

Hydrocyanic acid is found in 40 families of plants, and saponin in 70 families. Both together are found in 20 families.

In fermentation by yeasts, the presence of nitrates increases the yield of alcohol and the activity of fermentation, but hinders the growth of the yeasts.

The commission of scientists of Bordeaux which has been studying the effect of sulphurous acid in wine on the human system, concludes that in doses up to 6 grains it is "perfectly harmless."

Borax and Glycerin.—

Wm. Duncan, Philadelphia, says that when one molecule of borax is added to two molecules of glycerin a neutral solution is obtained which consists of sodium glyceryl-borate, $\text{NaC}_3\text{H}_7\text{OHBO}_3$, and boric acid. If four molecules of glycerin are added to one of borax the mixture contains sodium-glyceryl-borate and gly-

ceryl-boric acid: $\text{Na}_2\text{B}_4\text{O}_7 + \text{OH}_2\text{O} + 4\text{C}_3\text{H}_5(\text{OH})_3 = 2\text{NaC}_3\text{H}_7\text{OHBO}_3 + 2\text{C}_3\text{H}_7\text{OHBO}_3 + 13\text{H}_2\text{O}$. This glyceryl-boric acid is a much more energetic chemical agent than boric acid, and causes active effervescence with carbonates, liberates iodine from iodides, etc. On dilution with water glyceryl-boric acid is hydrolyzed to glycerin and boric acid, which is much less active chemically.

Disinfectant Soaps.—

W. Schranth says that disinfectants of an acid character, as phenol, cresol, resorcinol, etc., are not effective in soaps unless used in large amounts, because they are neutralized by the alkaline character of the soaps. But when used in excess the disinfecting power is increased by the soap. Thus a 50-per-cent phenol soap in 4-per-cent solution is as active as a 5-per-cent solution of phenol alone. Tar soaps containing high percentages of tar are not good disinfectants because they are not alkaline enough.

About Sterilizing.—

Violet rays from a mercury vapor lamp have been used successfully to sterilize medicinal solutions. Mercury, quinine, cocaine, morphine, guaiacol, and several arsenic solutions are easily sterilized in this way without injury. Apomorphine, eserine, and silver solutions are darkened by violet rays. Serums can also be sterilized by exposure to these rays.

A New Treatment.—

The injection of colloidal silver solution into the veins has been shown to inhibit the development of streptococcus infection and to promote resistance to tetanus, diphtheria, and dysentery toxins. Colloidal silver solutions are strongly antiseptic, and under proper conditions are tolerated in the body in very decided antiseptic amounts.

Aids to Digestion.—

The character of the acid which is associated with pepsin influences its digestive power. Hydrochloric acid aids the most, then come in order nitric, oxalic, phosphoric, sulphuric, tartaric, lactic, citric, acetic, and boric acids. Oxalic acid thus appears to be a better aid to protein digestion than the more common fruit-acids—citric, tartaric, etc.

Label, Libel, or Liable.—

Pantopon is a mixture of all the alkaloids of opium, in hydrochloride form, which is readily soluble and is stated to have all the hypnotic and analgesic properties of opium without its nauseating or constipating effects. It is claimed to be effective sometimes where morphine fails.

About Thunderstorms.—

C. G. Simpson accounts for thunderstorms by proving that the breaking of large drops of water into spray (such as must occur in storms) imparts a considerable positive electric charge to the water.

Dainty Wiping.—

Two Harvard chemists state that when one has a liquid too volatile to be dried in a desiccator and too small in amount to be distilled, it may be dried by wiping with slightly moist filter paper.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Exterminating Ants.

J. H. K.—Ants in the lawn, garden, or field are easily destroyed by digging a sharp stick into the center of the hill and pouring into it from 1 to 4 ounces of carbon bisulphide, then pressing the soil together again. The best time to thus destroy ants is immediately after a rain, when the ground is cool and damp and there is less rapid volatilization of the sulphide.

As for ants in the house, the following method has been suggested: Take a sponge and soak it in water, so as to swell it; squeeze all the water out. Turn it around in your hand and sift granulated sugar on it. Place the sponge near the ant infested spot and the insects will soon be attracted to it. After the sponge is filled with the ants hook on it a weight sufficiently heavy to pull it under water. Place the sponge in a pail or other vessel and let it sink. All the ants will get out and come to the surface, where they may be skimmed out and thrown into boiling water, or destroyed in some other effective way. Squeeze the water out of the sponge and dose it again with sugar. It will not take long to rid any place of ants, whether lawn or dwelling. The method is clean, safe, and is not troublesome.

The nests of the ants in the walls of the house or beneath the flooring are often difficult to reach, yet the headquarters of the marauders must be located if permanent respite from their ravages is to be obtained. If the nest is in the wall it is often possible to locate it by following the workers back to their place of entrance. In this case they may sometimes be reached by injecting bisulphide of carbon. Kerosene can also be forced in through a long-necked can. If the trouble is in the floor it is sometimes possible to get to them by taking up a section of the flooring.

If their stronghold is a little hill near the foundations of the house a kettle of boiling water or kerosene poured in the opening will exterminate them. An abundance of cold water applied with the garden hose on a lawn will discourage permanent residence. Meanwhile invest in the purest, strongest Cayenne pepper you can find in the market. Sprinkle thoroughly on all pantry shelves near the edges or under the oil-cloth or paper covers. Before using the Cayenne scald the shelves with boiling water and wipe dry. This scalding and treating with Cayenne may have to be repeated several times before making an effectual clearance. Often the window sills leading into pantry or dining-room from outside will be found in the track of travel and require the Cayenne treatment also. As

a further discourager to entrance move your sugar box or barrel to a new place for a while. This seems to puzzle the invaders and balk their plans.

J. M. Flynn, of Elburn, Illinois, says that he has taken a string or piece of tar rope, saturated it with oil of tar or pine tar, hung it about the shelves, and the ants have immediately left and not returned while there was any odor of the tar. We do not know that this would work with the small red ants, but Mr. Flynn has always found it satisfactory with the black ants.

Board-of-Pharmacy Secretaries in the United States.

F. L. W.—Here is the full list of secretaries:

Alabama—E. P. Galt, Selma.
 Arizona—A. G. Hulett, Phoenix.
 Arkansas—J. F. Dowdy, Little Rock.
 California—Louis Zeh, San Francisco.
 Colorado—S. L. Bresler, Denver.
 Connecticut—J. A. Levery, Bridgeport.
 Delaware—Albert Dougherty, Wilmington.
 District of Columbia—S. L. Hilton, Washington.
 Florida—D. W. Ramsaur, Palatka.
 Georgia—C. D. Jordan, Monticello.
 Idaho—T. M. Starrh, Shoshone Falls.
 Illinois—F. C. Dodds, Springfield.
 Indiana—W. H. Rudder, Salem.
 Iowa—Ed. J. Moore, Des Moines.
 Kansas—W. E. Sherrieff, Ellsworth.
 Kentucky—J. W. Gayle, Frankfort.
 Louisiana—Fred A. Earhart, New Orleans.
 Maine—Frank W. Bucknam, Skowhegan.
 Maryland—Ephraim Bacon, Roland Park.
 Massachusetts—P. J. McCormick, Boston.
 Michigan—Ed. J. Rodgers, Port Huron.
 Minnesota—Charles T. Heller, St. Paul.
 Mississippi—L. H. Wilkinson, Greenwood.
 Missouri—Charles E. Zinn, Kansas City.
 Montana—T. M. Kehoe, Billings.
 Nebraska—Frank Koss, Fremont.
 Nevada—R. L. Prouty, Tonopah.
 New Jersey—Henry A. Jordan, Bridgeton.
 New Hampshire—Frank H. Wingate, Nashua.
 New York—Warren L. Bradt, Albany.
 New Mexico—A. J. Fischer, Santa Fe.
 North Carolina—F. W. Hancock, Oxford.
 North Dakota—W. S. Parker, Lisbon.
 Ohio—Frank H. Frost, Columbus.
 Oklahoma—J. C. Burton, Stroud.
 Oregon—Clyde G. Huntley, Oregon City.
 Pennsylvania—Lucius L. Walton, Williamsport.
 Rhode Island—James E. Brennan, Pawtucket.
 South Carolina—Frank M. Smith, Charleston.
 South Dakota—E. C. Dent, Dell Rapids.
 Tennessee—Ira B. Clark, Nashville.
 Texas—R. H. Walker, Gonzales.
 Utah—Walter H. Dayton, Salt Lake City.
 Vermont—D. A. Davis, Barre.
 Virginia—T. A. Miller, Richmond.
 Washington—P. Jensen, Fernhill.
 West Virginia—Alfred Walker, Sutton.
 Wisconsin—Edward Williams, Madison.
 Wyoming—C. B. Gunnell, Evanston.

Three Difficult Mixtures.

E. B. submits three prescriptions with the request that we discuss them:

- (1) Spirit of turpentine.....½ pint.
 Olive oil½ pint.
 Camphor2 ounces.
 Sulphuric acid.....2 fluidounces.

Add the acid carefully a little at a time to the turpentine. When the heat has abated add the camphor and then the oil. Agitate and dispense with a shake label, because part of the sulphuric acid may remain out of solution.

- (2) Sodium sulphite50 grains.
 Diluted phosphoric acid.....½ fluidounce.
 Tincture of ferric chloride.....½ fluidounce.
 Syrup enough to make.....4 fluidounces.

Mix.

Dissolve the ferric chloride tincture in the syrup, add the acid and then the sodium sulphite. There may

be a slight odor of sulphur dioxide liberated from the sodium sulphite, but not enough to do any harm.

- (3) Mercuric chloride1 grain.
Tincture of ferric chloride.....3 fluidrachms.
Spirit of vini Gallici.....6 fluidrachms.
Elixir of lactated pepsin enough to
make4 fluidounces.

Mix.

In this mixture an ink will form, due to a reaction between the tannic acid in the wine and the iron. The prescription filled is unsightly.

Removing Tattoo Marks.

F. C. W.—The following method of removing tattoo marks is suggested by Henley's Book of Formulas:

Apply a highly concentrated tannin solution on the tattooed places and treat them with the tattooing needle as the tattooer does. Next vigorously rub the places with a lunar caustic stick and allow the silver nitrate to act for some time, until the tattooed portions have turned entirely black. Then take off by dabbing. At first a silver tannate forms on the upper layers of the skin, which dyes the tattooing black; with slight symptoms of inflammation a scurf ensues, which comes off after fourteen to sixteen days, leaving behind a reddish scar. The latter assumes the natural color of the skin after some time. The process is said to have given good results.

Since this method is borrowed from the literature, we are in no way responsible for any untoward results following its use.

For Perspiration.

L. B. wants a formula of a preparation that may be used "to deodorize perspiration."

Several formulas have been suggested for the treatment of odorous perspiration:

- (1) Zinc oleate4 drachms.
Boric acid3 drachms.

Mix. Keep the surface constantly covered with the powder.

- (2) Hydrastine hydrochloride.....5 grains.
Cologne water.....4 fluidounces.

Apply frequently to the surface.

- (3) Zinc oleate½ ounce.
Powdered starch1 ounce.
Salicylic acid20 grains.

Where the perspiration is not especially odorous you might try the following formula for a facial preparation:

- Lavender water50 grammes.
Lemon water50 grammes.
Peppermint water50 grammes.
Tincture of myrrh.....50 grammes.
Tincture of quillaya.....50 grammes.
Sodium carbonate20 grammes.

Three times daily moisten a portion of a napkin, dipped in water and wrung out, with the above mixture from a dropping bottle and wash the face with it.

For the hands and feet the following formula is suggested:

- Prepared Venetian talc.....20 ounces.
Powdered orris root.....10 ounces.
Oxide of zinc.....5 ounces.
Powdered tartaric acid.....5 ounces.
Powdered boric acid.....5 ounces.
Salicylic acid2½ ounces.
Menthol¼ ounce.
Oil of eucalyptus.....¼ ounce.

Make a fine powder to be applied to the hands and feet, or to be sprinkled inside the gloves or stockings.

As for the proprietary mixture you mention, we do not know its composition.

A Permanent Beef, Iron and Wine.

E. G. wants a formula for beef, iron and wine—one that will not sour. He adds: "I have tried the N. F. preparation and several others, but they all spoil."

The trouble must be due to using a wine of low alcoholic strength. Our querist is in a warm climate and needs to have the full alcoholic content in his preparation. If he will use a fortified wine—one containing not less than 16 per cent of alcohol—his beef, wine and iron will contain about 22 per cent of alcohol and will not sour under any conditions.

The N. F. preparation will be all right, or probably any other formula that he has tried. We suspect that his whole trouble has been due to using a light wine containing 6 or 8 per cent of alcohol.

A General Insecticide.

B. B. writes: "Kindly print a formula for a spray to be used in the house to keep flies away. I want something that can also be used as a general disinfectant."



THE COOBAN PHARMACY IN CHICAGO.—The readers of the BULLETIN of course know about B. S. Cooban, who has in times gone by contributed so many articles to this journal. We present here a "panoramic" view of his store. Inasmuch as it was made, however, by pasting two separate photographs together, and having them meet in the center, there is a little distortion of the lines which must be excused. Over the back room is a mezzanine gallery scarcely distinguishable in the photograph, and up here in this aerie Mr. Cooban has his desk.

tant for killing chicken mites and vermin of that kind. I want something that won't stain fabrics."

Use a one-per-cent solution of compound solution of cresol U. S. P. The preparation has a coal-tar smell which passes away in the course of a day. A one-per-cent solution ought not to injure fabrics, although it would be advisable to try the liquid on a restricted part of the cloth first. Make up a one-per-cent solution and apply it with a sprayer.

Tire Cement.

J. L. writes: "Please publish a formula for making rubber cement to repair the inner tubes of automobile tires; also one to fill cuts in the outer casing."

The following formulas for bicycle tire cements may serve for the repair of the outer casing if the hole is small. Of course to fix a rent or tear, it is necessary to vulcanize the tire:

Gutta percha.....½ ounce av.
Caoutchouc.....1 ounce av.
Carbon disulphide.....8 fluidounces.

Mix and dissolve.

This cement is dropped into the crevices after they have been properly cleaned. If the hole is big, apply the cement in layers. Bind up the rubber tire lightly with thread, let it dry for twenty-four to thirty-six hours, cut off the thread and remove the protruding cement with a sharp knife previously dipped in water.

Here is another formula:

Caoutchouc.....6½ ounces av.
Resin.....1 ounce av.
Lemon water.....50 grammes.
Carbon disulphide, enough to dissolve the other ingredients.

Use like the first formula.

To repair the inner tube, wash off the injured area with gasoline or sandpaper the surface about the puncture. Then apply the cement. Having also wet the rubber patch with the adhesive, stick it on the tire just over the hole. Apply pressure till the cement dries.

Kola Soda Syrups.

R. D. Co. wants a formula for kola soda syrups. Here are two:

- (1) Kola wine8 ounces.
Coca wine4 ounces.
Blackberry brandy1 ounce.
Lime juice1 ounce.
Raspberry juice (from fresh fruit)....4 ounces.
Rock-candy syrup8 ounces.

Serve one ounce to a mineral glass, with a little ice.

Wine of kola is made by percolating one ounce of the ground fresh kola-nut with ten ounces of sherry wine.

- (2) Kola cordial4 drachms.
Coca cordial1 ounce.
Calisaya cordial1 ounce.
Muscatel wine1½ ounces.
Frothing mixture2 drachms.
Raspberry syrup12 ounces.

Trim with fresh white grapes.

Removing Paint from Fabrics.

K. J. D.—Gasoline or benzine will take the oil of the paint out, and the paint pigment can then usually be removed by the use of warm water and soap-suds.

If this doesn't prove successful after a fair trial,

use chloroform very carefully—a little at a time on a cloth.

If the chloroform fails alcohol might do the work.

As a last resort make a mixture or emulsion of ammonia, two parts, and turpentine one part. Shake this up thoroughly and use with a cloth.

Sometimes if the paint is old or dry it is desirable to soften it up pretty well with olive oil or butter, and then go ahead with the removers.

A Difficult Capsule.

H. W. submits the following prescription, saying that he has tried all kinds of ways to fill it without success:

Acid sodium oleate.....1½ drachms.
Salicylic acid1½ drachms.
Phenolphthalein1 drachm.
Menthol15 grains.

Mix and make 60 capsules.

Add 200 grains of corn-starch to the formula. Mix the four medicinal ingredients together first, obtaining a semi-liquid mass. Then use starch as a drying powder and fill the capsules.

A Menthol Ointment.

E. L.—We do not know the composition of the proprietary mixture which you mention, but the following formula of a menthol ointment appears in the literature. Suppose you try it:

Camphor20 grains.
Menthol30 grains.
Thymol10 grains.
Boric acid15 grains.
White wax2 drachms.
White petrolatum, enough to make...8 drachms.

Glycerite of Pancreatin.

J. R. S. complains that he has not been able to get a good working formula for glycerite of pancreatin.

Squire's Companion to the British Pharmacopœia suggests the following formula:

Pancreatin10 parts.
Glycerin50 parts.
Simple elixir5 parts.
Distilled water enough to make.....100 parts.

Mix all and filter.

Fly-bane for Cattle.

J. W. B. wants a formula of a good preparation to keep flies off cows. One of our correspondents has found the following formula an excellent one to keep flies off horses and cattle:

Oil of pennyroyal.....4 drachms.
Oil of lavender.....2 drachms.
Carbolic acid1 drachm.
Fish oil enough to make.....1 pint.

Coloring Liquid Glass.

J. H. B. wants to know a dye that may be used to color liquid glass a pink color.

We suggest acid ruby.

K. R. T.—We do not know the composition of the proprietary salve which you mention.

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THE MONTH'S HISTORY

THE WILEY-RUSBY INCIDENT. The Wiley-Rusby entanglement, which was one of the newspaper sensations last month, seems to us a tempest in a teapot. It is scarcely necessary to repeat the facts, for they have been given wide publicity by the daily press from one end of the country to the other. Briefly, Dr. Rusby, as one of the outside pharmacognosists in the employ of the Department of Agriculture at Washington, working under Dr. Wiley in the enforcement of the food and drugs act, was originally paid at the rate of \$20 a day for laboratory work and \$50 a day as an expert in court trials. Later, Congress passed a law providing that government scientists should not receive to exceed an amount per diem which, extended through a full year, would amount to more

than \$3500. This meant a daily recompense of about \$9.

This so cut down Dr. Rusby's payment that he was actually losing money, particularly when away from home doing work as a court expert. He therefore notified Dr. Wiley that he would have to resign from the government service. Dr. Wiley was very anxious to retain his services, however, and after further correspondence with Dr. Rusby the latter declared that he was satisfied to accept the \$9 a day payment for laboratory work as a pharmacognosist, but he would have to receive \$50 a day when serving as a court expert. Even the \$50 figure was only half the amount received by him ordinarily for this service. Thereupon, it seems, Drs. Bigelow and Kebler, assistants of Dr. Wiley, developed with Dr. Wiley's approval an arrangement by means of which Dr. Rusby's salary was placed at \$1600 a year, the understanding being that he was to work only as many days as this amount would pay for at the average rate of \$20 a day. It was assumed that this daily rate of \$20 would strike such an average that Dr. Rusby would get the legal \$9 a day when employed as a pharmacognosist and \$50 a day when employed as a court expert.

* * *

UP TO PRESIDENT TAFT.

It is now charged that the foregoing arrangement was an offense against the plain intent of Congress. The Committee on Personnel of the Department of Agriculture, comprising Assistant Secretary Willett M. Hays, Solicitor George P. McCabe, and Chief Clerk C. C. Clark, after making an investigation of the facts, declared that the arrangement with Dr. Rusby was plainly illegal, and recommended that Dr. Rusby be dismissed from the service, that Dr. Kebler be reduced in rank so that he could no longer have any authority in such matters, and that Dr. Wiley and Dr. Bigelow be permitted to resign. This report was referred to Attorney-General

Wickersham, who, after making an analysis of the testimony, approved of the recommendations of the Committee on Personnel. Secretary Wilson thereupon finally passed the whole matter along to President Taft without making any recommendation himself, though the President afterwards requested him to pass judgment on it.

We are quite willing to believe that the letter of the law was perhaps violated in the arrangement made with Dr. Rusby. It does seem to us as laymen, however, that this violation was almost a pure technicality. Certainly Dr. Rusby was not overpaid. On the contrary, he was underpaid, and he received less from the government than he was regularly receiving from other sources. Furthermore, as he makes convincingly clear in his reply, if any legal mistake was made in employing him, the responsibility must rest upon the officials of the Department of Agriculture. To punish Dr. Rusby for accepting the conditions offered by them would surely be rank injustice. Of Dr. Rusby's lofty sense of integrity no one has any doubt, and fortunately this will carry him through the present situation without any loss of prestige.

As we stated at the outset, the whole thing seems to us a tempest in a teapot. It made good newspaper copy, however, and it was therefore seized upon with avidity. Some of the New York papers devoted a whole page to the subject on the first day, and it may be that the Ballinger incident is to be repeated in the case of Dr. Wiley. At this writing the president is daily expected to make a decision in the matter, and this may issue before the present number of the BULLETIN reaches its readers.

* * *

IMPORTS OF SUB-STANDARD DRUGS. Two very important papers on the food and drugs act have recently been presented by Dr. H. H. Rusby before the Vermont and New York State Pharmaceutical Associations. The Vermont address we are printing elsewhere in the present issue of the BULLETIN. In the New York contribution a suggestion was advanced which is quite likely to cause more or less discussion during the next few months.

As one of the pharmacognocists in the service of the U. S. government Dr. Rusby is of course thoroughly familiar with the rulings

of the customs authorities touching the deportation of crude drugs which do not come up to the standards. Dr. Rusby argues with conviction that the rejection of shipments often is unnecessary and results in great injustice. Sub-standard botanical drugs have a very wide legitimate use: if, for instance, they are alkaloidal drugs, they can be employed for the extraction of the alkaloids; if they are oil-containing drugs, they can be used for the distillation of oil; lots containing an insufficient amount of active principle can be used for the preparation of solid extracts; and the drugs themselves, even if sold again in the crude state, can first be shorn of their admixtures.

In these and many other ways imports which do not conform to pharmacopœial standards may be used with perfect legitimacy, and Dr. Rusby pointed out, furthermore, that there were many drugs in the Pharmacopœia which should be treated as opium is treated: the U. S. P. provides that a sub-standard opium may be mixed with a super-standard specimen in order to produce a mixture having the proper percentage of alkaloid. Why shouldn't this principle be extended to other drugs?

* * *

**DR. RUSBY'S
UNIQUE SUGGESTION.**

On the other hand, however, Dr. Rusby declared that if importations of sub-standard and adulterated crude drugs were permitted to enter the country freely, there would be little or no guaranty that the proper degree of rectification would be made before they were placed upon the open market for sale. In some way the government needs assurance that the consumer will be protected. To this end Dr. Rusby made a unique suggestion in the following language:

It has long been clear to me that the Federal government should provide a building to which defective goods should be taken, provided with every possible facility for standardizing them, and that importers should be given the option of having such goods deported, as now provided for, or of having their defects removed by government employees, or under government supervision, at actual cost. In this case, the portions removed as worthless could be destroyed by the authorities and certificates of their percentage supplied, when so desired by the owner

Dr. Rusby admitted that when importations had thus been shorn of their adulterants it would still be possible for unscrupulous dealers

to resophisticate them before offering them for sale, but this would represent an entirely different offense, without extenuation or excuse traceable to the importer, and could be separately and severely dealt with. Whether the Rusby idea will prove upon further thought to be practicable, and whether it will be approved by even the honest dealers who are anxious always to do the square thing, will be better determined after more careful consideration has been given to the proposal.

* * *

ANNUAL MEETING OF THE CLERKS.

The first annual meeting of the new society of drug clerks known as the National Association of Pharmacologists was held recently in Columbus, Ohio. Mayor Marshall welcomed the delegates, and a speech was also made by Governor Harmon, upon whom a special committee called at the executive offices in the State Capitol. Reports were made by the various officers of the association, and it seemed to be generally agreed that the vital necessity just at present was to push the work of organization. So far State committees have been appointed in 25 States, with county committees organized in some instances. City branches are also under headway in places like Atlanta, Boston, Cleveland, Chicago, Louisville, Philadelphia, and several other leading centers.

During the past winter the N. A. P. has been active in legislative matters but succeeded only in securing the passage of the anti-sampling law in Ohio—a measure which has already been referred to in the BULLETIN. In the future particular attention will be paid to such violations of the law as leaving unregistered and incompetent help in charge of drug stores. Resolutions were passed providing that the next annual meeting will be held in Akron, Ohio, on the first Tuesday in September, 1912; that governors in the different States be furnished annually with the names of two members of the N. A. P., and asked to appoint one of them on the State Board of Pharmacy; that effort be made to secure recognition on the Revision Committee of the U. S. P.; and that a delegate be appointed to attend the forthcoming convention of the N. A. R. D. at Niagara Falls.

The newly elected officers are: president, D. N. Robin of Pittsburg; vice-presidents,

Charles H. Bowersox of Columbus, F. M. Blank of Akron, Ohio, Willard C. Gantz of Terre Haute, Ind.; secretary-treasurer, P. A. Mandabach of Columbus (re-elected). A. P. Johnson of Terre Haute is chairman of the National Auditing Committee, and Charles H. Bowersox is chairman of the National Publicity Committee.

* * *

SOME LEGISLATIVE SCRAPS.

Among the diverting features of several of the State association meetings this year have been lively scraps over legislative matters. These developed in at least three States—Illinois, California and Pennsylvania. In the former two States the contest was largely over the failure this past winter to enact a graduation prerequisite law, concerning which there are pro and con factions in each State. In both cases the fight is to be renewed and graduation prerequisite measures will again be introduced at the next sessions of the legislatures.

At the Pennsylvania meeting the contest was over a general bill which, introduced in the legislature last winter, represented a codification of the existing pharmacy and narcotic laws, and involved many new provisions as well. The draft was so comprehensive in nature, and contained so many provisions, that it was found almost impossible to get general agreement on everything, and as a result it failed of passage in the legislature this spring. John C. Wallace, the able and fearless chairman of the Committee on Legislation of the State association, read a report at the recent annual meeting giving a brief and interesting history of the winter's troubles over the measure, and in some supplementary remarks of an extemporaneous character he criticized Mr. P. W. Snyder, a member of the Legislative Committee and also a member of the legislature itself, for refusing to introduce the bill and to stand sponsor for it as he had promised.

The ensuing debate was one of great dramatic interest, in which Mr. Snyder defended himself and declared that there were several provisions in the measure which deserved further consideration at the hands of the State association. The final upshot of the whole matter was the adoption of a motion to refer the bill back to the Legislative Committee with instructions to make certain changes, and have

copies printed a month before the convention next year. Then, when the association has finally approved of the bill, and made such further changes as it may elect, everybody will be expected to turn in and work hard for the enactment of the draft into law at the hands of the State legislature.

* * *

THE A. M. A. MEETING.

The sixty-second annual meeting of the American Medical Association, held in Los Angeles, resulted in some surprises. The anti-administration party, which has apparently been developing strength of late years, succeeded in electing Dr. Abraham Jacobi of New York over Dr. J. N. McCormack of Kentucky. Dr. Alexander R. Craig of Chicago was elected general secretary to succeed Dr. George H. Simmons, although Dr. Simmons remains editor of the *Journal*. Of the resolutions adopted at the meeting, one declared against the issuance of patents on products and held that patents should be granted on processes of manufacture only. Another resolution approved of the Owen bill providing for the establishment of a national department of health. The action taken of greatest interest to pharmacists, however, was the adoption of a series of resolutions disapproving of medical dispensing except in cases of necessity, and declared at the same time that druggists should refrain from counter-prescribing and cooperate with the medical profession in the abolition of mutual evils.

* * *

THE STAMP-TAX BILL.

We have not had very much to say in the BULLETIN about the Sherley stamp-tax bill in the National Congress for the reason that we learned early that there was no danger whatever of this bill being taken up for consideration at the present special session. No action has been or will be taken upon it. It may possibly come up again at the regular session beginning with December, and for this reason it will be wise for the drug trade to organize its fighting forces.

Of course a measure of this kind, placing a discriminating tax on proprietary medicines and toilet articles, is highly unjust from every point of view. In the first place it is special taxation on a particular class in a community

—a class, moreover, which is already heavily taxed under internal revenue laws and the liquor and pharmacy acts of the several States. History shows that neither the manufacturer nor the jobber bears the burden but passes it along to the retailer on the assumption that he in turn will shove it off on the consumer. Since, however, the retail prices of proprietary articles are either printed on the package or are fixed by local custom, the retailer is unable to recoup himself and therefore has to stand the burden alone. In effect this practically amounts to an income tax of from 10 to 20 per cent!

No wonder, therefore, that nearly all of the State pharmaceutical associations this summer have passed warm resolutions against the Sherley bill. In Sherley's own State, that of Kentucky, the Pharmaceutical Association not only condemned the measure but appointed a committee of three, headed by Simon N. Jones, to appear before the Ways and Means Committee of the house and voice a protest against the measure.

* * *

TO AMEND THE FOOD AND DRUGS ACT.

As was to be expected, President Taft's eloquent appeal to Congress to amend the food and drugs act so that exaggerated therapeutic claims would come within the purview of the law, has caused the introduction of several measures looking toward this end. The simplest one is that of Representative Sherley, author of the stamp-tax bill, which simply adds a paragraph to the misbranding provision of the act declaring that any product will violate this section "if its package or label shall bear any statement, design, or device regarding the curative or therapeutic effect of such article which is false or fraudulent." This seems to cover the necessities of the case very briefly and adequately, without affecting the law in any other particular.

Some of the other bills, however, go much farther, supplementing the act in several particulars, and among other things adding 15 or 20 substances to the list of inhibited drugs which must be mentioned on the label. There seems to be a disposition to seize upon the present situation and amend the law generally, and if it develops far enough it will have the effect of killing the whole thing so far as the present special session is concerned.

The Democratic leaders seem opposed to the consideration of any subjects at the special session except those relating to the tariff and revenues, and in order to head off the present activity regarding the food and drugs act it is suspected that they are quietly planning to hold back the several amendatory bills until the close of the session and then pass one of them quickly just before adjournment. The session will probably close early in August and some action may possibly be taken by the time this number of the BULLETIN reaches its readers.

* * *

A good deal of excitement **A FAMILY QUARREL.** has been caused during the last few months by the growing differences between the American Druggists' Syndicate and the Chicago Wholesale Drug Co. The latter was originally a local branch of the A. D. S., but Mr. Goddard charges that after it became regularly incorporated as a coöperative jobbing house it began to look after its own interests at the expense of its former parent. The Chicago people reply that the discounts on many A. D. S. goods were too small, that the prices were often too high, and that there were frequent complaints on the score of quality from customers. The situation became more and more strained until finally Mr. Goddard cut off the C. W. D. Co. from A. D. S. supplies, and established several emergency depots in Chicago. The A. D. S. point of view is given in an article in a recent issue of *The Voice of the Retail Druggist*, prepared by Mr. Goddard, while the explanation of the Chicago Wholesale Drug Co. is contributed by Manager Matthew White to an issue of *C. R. D. A. News*. Charges and counter charges are made by the two gentlemen with a good deal of vigor.

* * *

There is now being considered by the A. Ph. A. a proposition to publish a general recipe book of miscellaneous formulas. A special committee, of which Otto Raubenheimer is the chairman, has recommended to the Council that such a book be published, and the subject will probably be discussed at the Boston meeting this month. In general the proposition seems to be to provide a place where the overflow from the U. S. P. and

the N. F. can be caught and kept. It has been feared by a good many people that many of the formulas in the N. F., for instance, were unscientific and undesirable in character, and those who originally brought forward the idea of a general recipe book thought this would provide an opportunity of removing such things from the N. F. and therefore from official and legal sanction.

* * *

THE N. A. R. D. CONVENTION.

Great plans are being made for the Niagara Falls convention of the N. A. R. D. in September. It is hoped to have this the largest and the best meeting of the entire series. *N. A. R. D. Notes* is authority for the statement that from present indications there will be at least twice as many delegates and visitors as the meetings have attracted before. The exhibit will be in the Cataract House, whereas the International Hotel will be used for headquarters. The two buildings adjoin one another and the convention hall and the exhibit hall are on the same floor in close proximity to each other. Judge Errant has recently proposed that one special session of the meeting be devoted to a thorough discussion of legislative matters, and the idea strikes us as being a good one.

* * *

The pharmacists of at least two States, Massachusetts and Indiana, are anxious to have one of their number on the State Board of Health. The Indiana association, at its recent annual meeting, voted to ask the governor to appoint F. W. Meissner, while the Massachusetts association sent three names to His Excellency with the request that he select one of them.

* * *

The New York State Pharmaceutical Association has voted to ask the legislature to pass a bill giving the name of "Wood Naphtha" to wood alcohol. This is in line with a Minnesota statute which has received the approval of the N. A. R. D.

* * *

William H. Gale, one of the old-time druggists in Chicago, and a man 77 years old, was unfortunately killed at a railroad crossing a few weeks ago.

EDITORIAL

THE NULLIFICATION OF STATE PROHIBITION AND ANTI-NARCOTIC LAWS.

In the July BULLETIN we showed how the State anti-narcotic laws were in many sections of the country practically nullified by the absence of a Federal statute. A State law applies only to the purchase and sale of narcotics within the borders of that particular State. A dealer a few miles away in an adjoining State, however, even if there be an efficient anti-narcotic law there also, may ship supplies across the border with perfect impunity. This is interstate commerce; it is carried on under the jurisdiction of the Federal government; and State laws do not apply in the least degree.

Recent developments show how this sort of thing works out in the liquor traffic. As a result of the wave of local-option sentiment spreading over the country during the last few years nearly one-half of the entire population of the United States, occupying about two-thirds of the geographical area, is now living in "dry" territory.

During all this agitation and voting out of the saloon, however, careful students of the movement have discovered that the total production and consumption of liquor, as reported upon annually by the Revenue Department at Washington, has diminished to a very slight degree. What is the explanation?

It now appears that the answer is largely to be found in the enormous development of interstate business done by mail-order liquor houses. The facts have come out as the result of a complaint made to the Interstate Commerce Commission by the Southern Mail-order Liquor Dealers' Association. This association thought it had a grievance because it was discriminated against by certain regulations of the express companies. It protested that the transportation charges for stone jars were based upon arbitrary and excessive weights, and were otherwise unfair and unjust. Commissioner McChord, who wrote the decision of the Commission, supported the contention of the association and held that the express companies might request that liquor packages be shipped in corrugated cartons, but declared that they could not discriminate so manifestly against stone jugs.

It is not the justice or injustice of this decision, however, to which we desire to call attention, but the mere fact that the Interstate Commerce Commission held itself powerless to do anything but recognize this illegitimate transportation of liquor into dry territory. Commissioner McChord declared that "the decision of the Supreme Court that this traffic was interstate, and therefore superior to interference by the State governments, had given the industry a tremendous impetus and established the express companies as the carriers of practically the whole of this traffic." The Commissioner closed his opinion with the significant statement that while it was not the function of the Commission to pass upon the moral aspects of the case, he nevertheless considered that this traffic "has an evil effect on and is one of the important factors in the race problem of the South."

During the course of this trial and from other sources it was discovered that the interstate mail-order houses are selling about twenty million gallons of liquor a year. Of course this is all being shipped into "dry" localities where the people have voted by small or large majorities to outlaw the liquor business. In other words, by means of the mixed jurisdiction of State and Federal governments, the people of a city, a county, or a State are unable to carry out their own will! Even in the prohibition State of Georgia it has been found that in the cities of Augusta and Savannah a mail-order whisky business is done annually to the extent of 215,150 gallons in the former town and 100,000 gallons in the latter.

This editorial is not written for the purpose of expressing any particular convictions on the liquor business. In times past we have argued that, whether or not the liquor traffic were allowed to continue, its place was not in the drug store; and we have sought to warn pharmacists against the very great danger to them involved in this temperance movement which drives liquor out of the hotels and saloons and forces the demand elsewhere. Our present object, however, is solely to point out the incontestable truth, more particularly with reference to the illegitimate sale of narcotics, that our present State laws are very largely rendered nugatory by the absence of a Federal statute regulating interstate commerce.

We in the drug trade ought to keep up our

agitation for a national anti-narcotic law. We can safely leave the demand for an interstate liquor law to those who are more directly interested in the abolition or restriction of the liquor traffic.

AMENDMENT PROPOSED FOR THE SHERMAN ACT.

Frank H. Freericks is one of those who believe that the recent decisions of the Supreme Court in the Standard Oil and Tobacco cases promise no relief in the elaboration of any plans which might be devised by the retail druggists of the country for the prevention of price cutting. The court has held in these two cases that a mere combination in restraint of trade was not in itself in violation of the Sherman act unless the restraint were unreasonable in character. Mr. Freericks believes, however, that the court was discussing, not restraints upon prices, but such restraints as follow upon a partial destruction of competition by the amalgamation into one concern of different companies in the same branch of industry or commerce.

The logical inference is, if Mr. Freericks is right, that any future attempt to apply such price-restraint measures in the drug trade as were represented by the old tripartite plan would still be held in violation of the Sherman act, despite the "light of reason" with which the act is now viewed by the Supreme Court. Whether Mr. Freericks is right remains to be seen. In any event he has drawn up some resolutions which have been adopted by the Ohio Valley Druggists' Association:

Whereas, The Supreme Court in its wisdom has found that the Sherman Anti-trust act (which under strict interpretation would make unlawful even the formation of a partnership enterprise) must be construed in the light of reason; and,

Whereas, Said law has been and may be used to stifle and prevent all coöperation among merchants to protect themselves against the ever-growing tendency of unlimited capital in the hands of one or a few to monopolize entire branches of trade or industry by temporarily underselling or otherwise; and,

Whereas, The continued welfare of our country depends upon maintaining and protecting the great middle classes (constituted largely of merchants with limited means), so that as a people we may not all be reduced to a state of hirelings, without opportunity for energy and ability alone to acquire or continue business independence; therefore be it

Resolved, That in view of the present agitation for an amendment to the Sherman Act, it is our judgment

that such proposed amendment should be drawn in the spirit which we believe prompted the original legislation, so that said legislation may not be used to crush smaller merchants and tradespeople, but permit them to enter into necessary agreements and coöperation for the purpose of protecting against greed and desire to monopolize.

Resolved, That a copy of these resolutions be sent to the President of the United States, to the Chief Justice of the Supreme Court, to the Governor of Ohio, to the United States Senators from Ohio, and to the members of Congress from the First and Second Districts of this State.

Other associations affiliated with the N. A. R. D. have been urged to take similar action, and it is quite likely that the subject will be brought forward for discussion at the Niagara Falls meeting of the N. A. R. D. in September. It might be well to consider, however, that such agitation as has developed in Congress or out of it, for the amending of the Sherman law since the Supreme Court decisions were rendered, has looked toward a tightening of the bars instead of a further loosening of them. It is therefore a little doubtful whether the present situation affords much possibility of legislative relief for the small merchants of the country.

The governmental ruling tabooing the use of saccharin in foods has been held in abeyance and will not go into force until January 1, 1912. In the meantime, however, it should be thoroughly understood by the drug trade that it only affects foods and *not* drugs.

An organization of drug clerks in New York City, known as the National Pharmaceutical Society, has at last succeeded in its purpose of getting one of its members appointed on the State Board of Pharmacy. John R. Wall is the lucky man.

Charles M. Ford of Denver, who enjoys a national reputation as a pharmacist, and is well known personally to many druggists, has been appointed Drug Inspector by the Colorado State Board of Health.

The directors of Billings, Clapp & Co. of Boston have decided to wind up the affairs of the business, and this action is now being taken.

THE HALL OF FAME

DEATH OF DR. BAIRD.

Dr. Julian W. Baird, dean of the Massachusetts College of Pharmacy, died recently at his home in Boston. The funeral services were held at the College building on St. Botolph Street and were attended by pharmacists and students. Dr. Baird had been with the College about 25 years. Always silent, retiring, and even taciturn, it was hard for the ordinary observer to get the measure of the man, but those who knew him intimately all spoke with real conviction of his strength and character. The late Dr. Prescott, under whom Dr. Baird was graduated at the School of Pharmacy of the University of Michigan, invariably spoke in terms of unwonted enthusi-



DR. JULIAN W. BAIRD.

asm of his former student. He was nearly always in attendance at the annual meetings of the A. Ph. A., but there he played his customary rôle of silent observer. His associates in the Massachusetts College deplore his loss greatly and feel that the withdrawal of his services is a severe blow.

A SUCCESSFUL SOUTHERNER.

Ernest Berger of Tampa, Florida, has a very successful business in that city, and during the last year has started the organization of a coöperative cigar factory among the

druggists of the country. Mr. Berger has been a member of the Florida State Board of Pharmacy for quite a number of years. From 1899 to 1906 he was secretary of the Board, and since 1906 he has been the president of it. He is also just now president of the Southern



ERNEST BERGER.

Association of Boards of Pharmacy, and is as well the first vice-president of the National Association of Boards of Pharmacy. In the meantime he is third vice-president of the American Pharmaceutical Association. Rather a choice collection of presidential honors to have at one time!

PROFESSOR ARNY SUCCEEDS DR. COBLENTZ.

One of the bits of personal news of the last month or two is the announcement, which has already been greeted with a good deal of interest, that Prof. Harry Vin Arny has been appointed successor to Dr. Coblenz as professor of chemistry in the New York College of Pharmacy. In order to accept this place Professor Arny leaves the deanship of the Cleveland School of Pharmacy, and his absence will doubtless be keenly felt in that institution. Not only has he conducted the affairs of the Cleveland College with a good deal of energy and even brilliancy, but he has been a leading figure in the pharmaceutical affairs generally of Cleveland and northern Ohio. For several years he has acted as secretary of the local association and has edited the official organ of that body. He has been an

officer likewise in both the Cleveland branch of the A. Ph. A. and the Medico-Pharmaceutical Section of the local medical society.

A hard and untiring worker, a man of unusual zeal and enthusiasm, he will certainly be an asset to the New York College of Pharmacy. Professor Arny is an alumnus of the



PROF. HARRY VIN ARNY.

Philadelphia College of Pharmacy, class of 1889, and he has a degree of Doctor of Pharmacy from the University of Göttingen in Germany. His treatise entitled "Principles of Pharmacy," a voluminous book, has already become well known, although but two or three years old.

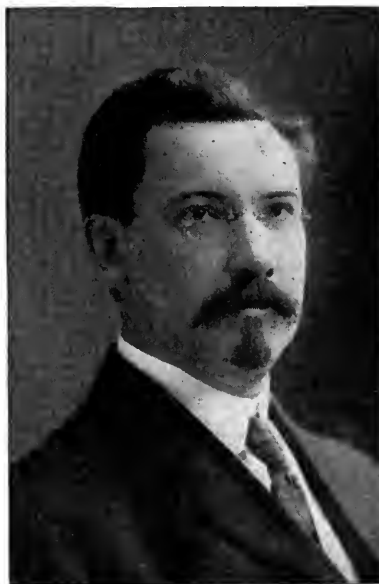
DEATH OF SHERMAN R. MACY.

Sherman R. Macy, Dean of the Highland Park College of Pharmacy and Chemistry, died suddenly of heart failure on July 7 at his residence in Des Moines, Iowa. Professor Macy was born August 3, 1865, at Bloomfield, Iowa. He was graduated in pharmacy and chemistry from Northwestern University in 1890, and the year 1895 he spent in research work at Northwestern, which earned him the Doctor's degree. For twenty-one years he was associated with the Highland Park College. During this period he was for seven years State Chemist of Iowa, and in this capacity he appeared as an expert witness in behalf of the State at many murder trials involving poisons. Some years ago he had also served as State Chemist of Idaho for a time while seeking health in the mountains. During that period he organized the Idaho Pure Food and

Drug Board. His text-book on qualitative analysis is used by the Armour Institute and other prominent technical schools, and for over twenty years he had been a member of the American Chemical Society and the American Pharmaceutical Association.

DR. ANDERSON OUT OF THE RETAIL BUSINESS.

Considerable interest has greeted the announcement that Dr. W. C. Anderson has sold his store at 320 Lafayette Avenue in Brooklyn. He has presumably taken this step in order to give himself adequate time for the many other interests which engage his attention. Dr. Anderson is dean of, and professor of pharmacy in, the Brooklyn College of Pharmacy, and this alone must consume a good deal of his time. In many institutions



DR. W. C. ANDERSON.

such a position keeps a man busy of itself. In addition to this, however, Dr. Anderson has an executive position in the A. D. S., and, if we mistake not, is the New York State representative of the American Druggists' Fire Insurance Company. Apart from these remunerative employments he is always an officer or a committeeman of one or more pharmaceutical organizations, and it is doubtless to give himself time for these numerous interests and activities that he has decided to relieve himself of the routine duties of conducting a drug store.



The new main store of the Shaw Drug Co. in Denver, Colorado, is a very handsome and elaborate establishment. A portion of the salesroom is here indicated.



The Shaw store is located in the Metropolitan Building. This structure was erected for the exclusive use of physicians, and 80 of them have their offices in it.



Here we have a view of the prescription department of the Shaw Drug store in Denver. It is quite apparent from the size of the force that a very gratifying prescription business is enjoyed.



F. A. Patrick, Palestine, Texas, the proprietor of this store, is one of the veterans of the Civil War, and he frequently weaves in references to war matters in his advertisements.



Here we have the Red Cross Pharmacy located at 624 Commercial Street, Emporia, Kansas. The tables down through the center of the store indicate that a considerable soda business is done in this establishment.

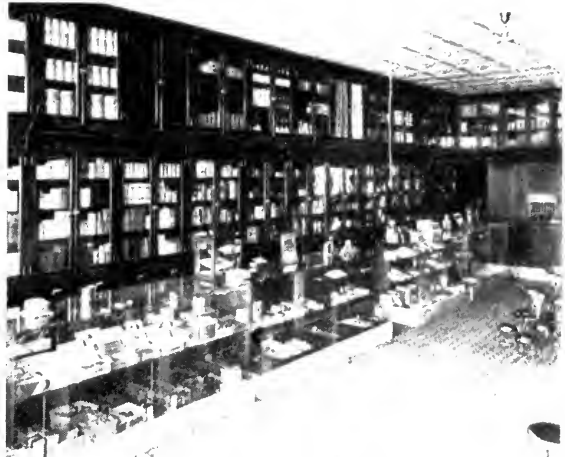


Martin Luther (with a distinguished name which leaves little to be desired) is located in the pretty town of Kalamazoo, Mich. Kalamazoo is evidently famous for other things besides celery.

Some American Drug Stores.



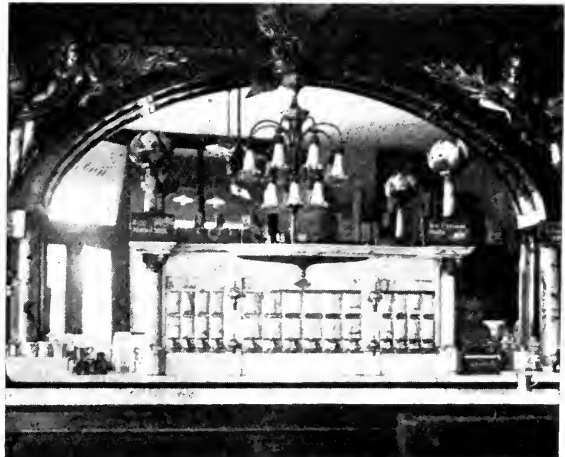
N. E. Williams, of St. Louis, located in the Metropolitan Building occupied entirely by physicians, does practically nothing but a pure prescription business. This is a view of the waiting-room.



The Earl Drug Co. is located in Ridgway, Pa. The fixtures of this well-equipped place were installed by the Wilmarth Show Case Co. of Grand Rapids, Mich.



Adolph Bakst & Co. are the proprietors of this store at 230 Plain Street, Providence, R. I. From the signs on the front of the door it would seem that a specialty is made of the prescription business.



Here we have a partial view of the soda fountain of B. S. Cooban & Co., 63d Street and Normal Avenue, Chicago. Mr. Cooban gets 10 cents for ice-cream soda and does an enormous business in it.



W. J. Haynes is located in Breckenridge, Stephens county, Texas. It is somewhat unique to see pianos for sale in a drug store, but possibly this one was used for some other purpose.



Lee Williamson & Co. opened this beautiful new store in Baltimore not long since. It is within one block of the main shopping street and is connected with one of the leading theaters.

Some American Drug Stores.



Prof. Oscar Oldberg, retiring dean of the Northwestern School of Pharmacy, 7808 Union Avenue, Auburn Park, Chicago.



Charles H. Ward, chairman of the Executive Board of the California Pharmaceutical Association, Pasadena.



Howard Nichols, proprietor of "Walnutta Hair Stain," St. Louis, Mo.



A. H. Noble, Jr., together with Mrs. Noble, planned and built this home in Nashville, Tenn.

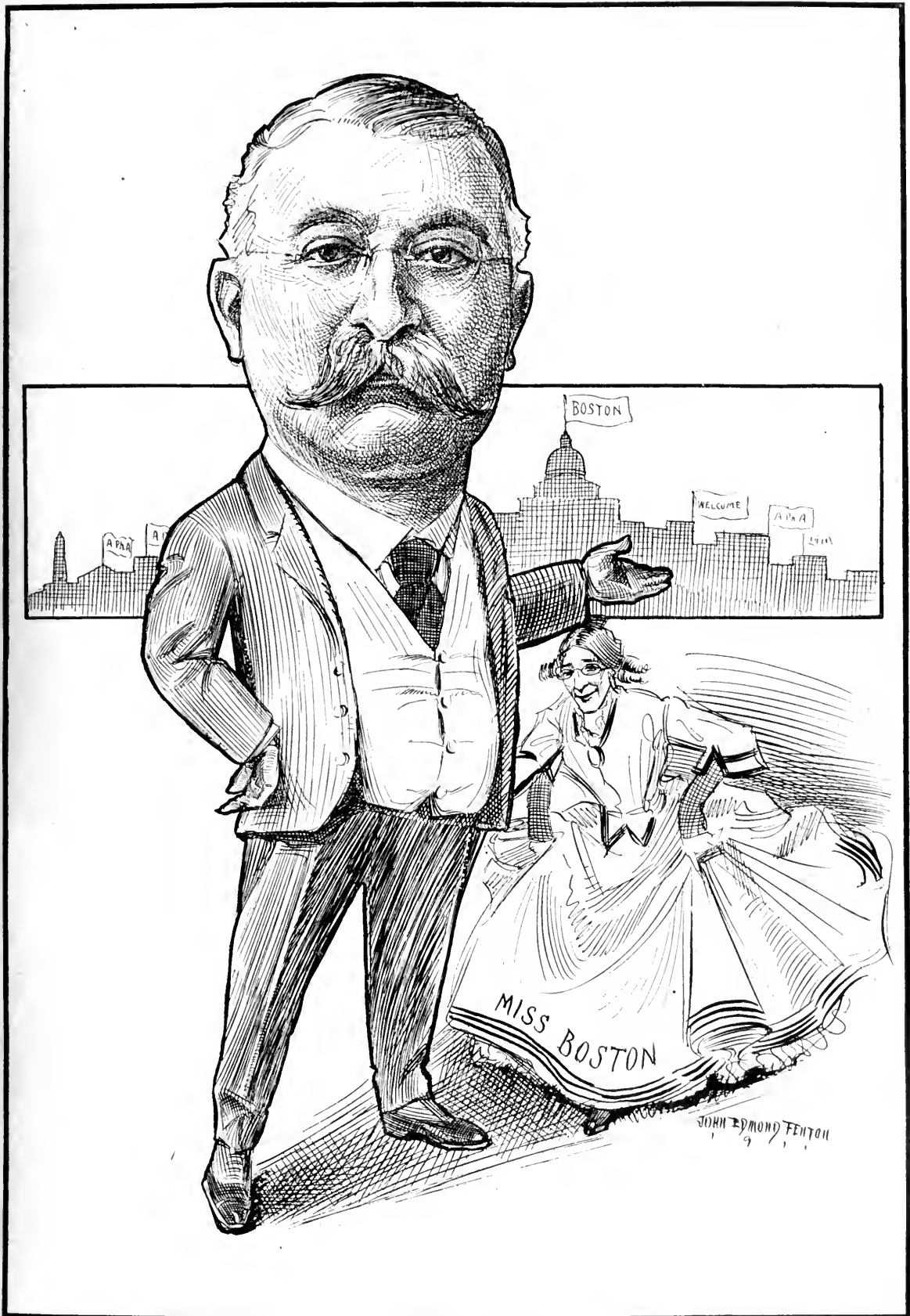


E. Berger, president of the Florida State Board of Pharmacy, occupies the second residence at the left.



O. P. McPherson, of Gloster, Miss., has a cottage at the "Health and Pleasure Resort of the Woodmen of the World."

Homes of Well-known Druggists.



Welcome to Boston!

John G. Godding will be conspicuous among the local hosts at the meeting of the American Pharmaceutical Association next month, and at the close of the convention will be installed as president of the organization for the coming year.

THE FOOD AND DRUGS ACT.

The Basic Principles Underlying It—Community Action taken by a Self-governing People to Protect Their Own Health and Pocketbooks—The Importance of Extending the Same Supervision Over Other Classes of Merchandise.*

By DR. H. H. RUSBY.

The Federal Food and Drugs Act of 1906 was based upon, and its character determined by, certain principles which are fundamental in our system of government. Upon the more general recognition of these principles, and upon farther and broader legislation based upon them, will depend, in great measure, the health and comfort of our people and even the continued success of our government. It is these principles and their applications which I wish to discuss to-day, rather than the specific provisions or the workings of this law.

OUR SYSTEM OF GOVERNMENT.

No law can be safely considered otherwise than in its relation to the particular form of government that is to administer it. We must therefore begin by reminding ourselves that the theory of our form of government is that we govern ourselves through certain individuals chosen from among and of ourselves, for the performance of specific duties which can be better performed by them for the entire community than by each individual for himself. The individuals thus selected together constitute the administration, commonly miscalled the government. In reality, we are ourselves the government.

The logical thinker will see that paternalism is not a possibility in such a government. If it were possible for our administration to engage in paternalism, then we must all be our own parents, for it would be a case of practicing paternalism upon ourselves. Whenever we hear a man complain that one of our laws, or its administration, is paternalistic, let us remember that while such influences may act under other forms of government, the expression is here necessarily self-contradictory. What such a critic usually means, though he certainly does not intend to publish the fact, is that he desires to engage in some course of

procedure that is unjust or otherwise injurious to his fellows, and that the law in question is doing exactly what it was intended to do, namely, protecting them against the execution of his design.

This protection may take the very mild form of preventing a profit so excessive as to be opposed to the public welfare, of insuring the quality of the goods called for by the contract, or the more serious one of preventing an absolute swindle or the furnishing of some article dangerous to life, such as a poison, a habit-forming drug, or a deadly weapon in the hands of children. Our courts have determined that it is even a proper function of such laws to prevent the formation or indulgence of immoral habits, against which many of our laws are directed, to protect young people. In all these cases, it is to be noted that the people have, after deliberation and discussion, decided that it is desirable and proper to unite in acting for the common welfare, and to appoint officials to take such action.

This is genuine coöperation. According to our socialist friends, it is socialism in its essential nature. These terms we need not discuss. Whatever name we apply to it, we must recognize that the principle involved is that government is justified in doing such things for all of the people as will be better done in that way, all things taken into consideration, than through individual action. We often hear people discussing the question whether certain acts constitute "proper functions" of government. I think it is not too much to say that, if the above principle is complied with, no legal act can be regarded as an improper function of government.

The expression "all things considered," here employed, of course requires careful attention and involves many considerations. If we go too far in substituting community for individual action, we may interfere with the proper strengthening and developing process

*An address delivered before the Vermont State Pharmaceutical Association and communicated to the BULLETIN OF PHARMACY by the author.

of the individual and we may interfere with personal freedom. In that case, the result is not being so well attained, "all things considered," by the government as it would be by the individual. In deciding such cases, it is imperative that we consider the nature and importance of the service, the relative practicability of its being performed individually or in common, and the extent to which community action will detract from a proper interest and activity on the part of the individual.

ITS APPLICATION TO THE FOOD AND DRUGS ACT.

Applying these tests to the act in question, we are called upon to consider (1) whether there is any necessity for the regulation of the food and drug trade, and, if so, (2) whether the people individually are as competent to regulate it as through officers of administration.

As to whether a necessity exists for the regulation of the trade in drugs, medicines and foods, it seems strange that there should be any question, yet it is by no means uncommon to hear the fact denied, so we may well consider the conditions which furnish an answer to this question.

In the purchase of such articles at first hand, both the seller and the purchaser are supposed to be exceptionally well informed as to the quality and price, so that there is an approximate conformity between them. The farther that we get away from first-hands, toward and to the consumer, the less there is of this knowledge, and the greater the opportunity for exacting a price one or more grades higher than the quality of the article justifies. It thus happens that the dealer is in a position, if he choose, to purchase a low-grade article at its correct price, and to sell it at a higher one to an uninformed merchant or consumer.

Of course the margin of profit is then greater by dealing in low-grade articles than in the better ones, but it is often claimed that none will care to engage in such practices, and that dealers are so honest that we need not fear misrepresentation of the grade or price of merchandise. This claim, I think, it is hardly worth while to discuss. It may safely be left to the judgment of any one who has had his business eye-teeth cut. He who has not yet submitted to such operations may be

confidently expected to undergo them if he assumes an attitude of blind trust in his business.

THE NECESSITY FOR REGULATION.

A number of incidents illustrative of the truth in regard to this matter occur to me as I write. I once traveled on a steamer that carried thirty-five hundred tons of licorice root. If the owner could have sold that cargo at the price of a grade one-half cent higher than its quality justified, he would have netted \$35,000 by the act. One of my friends who manufactures licorice has filled in a deep swamp in Jersey City, making a full-sized city lot and the four streets surrounding it into good, high, dry land, *with the earth removed from his licorice root!* Imagine the total weight of this material and remember that it was all paid for at the price of licorice root! I have seen a lot of many tons of nuxvomica seeds which had been rolled in clay until they bore a coating which probably increased their weight by at least 50 per cent. I have often seen buchu leaves to which had been added their own weight of stems, chopped as finely as coarse sand. Asafetida frequently contains from 30 to 50 per cent of chopped stones, and I have seen the same in cut dandelion root. Those who are acquainted with my papers before the American Pharmaceutical Association will recall many similar forms of fraud. Who will then say that a close scrutiny of commercial drugs by some one, at some point between producer and consumer, is not a strict necessity?

I have considered in these cases only acts of deliberate fraud, of a kind which must be considered exceptional in the drug trade, but what about the occurrence of similar results through carelessness or inattention? The collection of our native drugs is performed chiefly in very small lots, by the most ignorant, careless people, who trade their product at the village store. The merchant or his clerk, often equally ignorant, combine these small parcels to make up a shipment to the general agent. Mistakes of identity, foreign admixtures, the adherence of earth to roots, of stems to leaves, of wood to barks, and various other accidents, must be expected, and they call quite as strongly for correction as do the results of the fraudulent acts previously considered. What do such people know of alkaloidal standards? How fatuous to de-

pend upon them for regulation of the trade! What training, moreover, does the average pharmacist receive in such directions? In my teaching at the New York College of Pharmacy, I deem it one of my most important duties to instruct my students against every one of these pitfalls, but what percentage of the pharmacists of the United States can claim that they have had such training?

If such attempts are commonly made in the case of crude drugs, where detection is of the easiest, can we expect less in the case of manufactured articles? Is it or is it not human nature to take an easy advantage in a trade? Certainly such conduct is by no means universal, nor even the rule, but malefactors would quickly enough force most business down to their own level were no restrictions placed upon them. We have found the country flooded with adulterated and sub-standard powdered drugs, with adulterated chemicals, with tablets and capsules containing short-weight and substituted articles. I have found one large manufacturing house labeling its galenical preparations as containing the standard percentage of constituents, yet never assaying them to ascertain the actual character of the articles before affixing the label.

PREVALENCE OF FOOD SOPHISTICATION.

Turning to the second application of the law, what have we found true of the food-stuffs distributed by our grocer friends? You of Vermont know that no matter how honestly you might prepare your maple products, their composition, when they reach the table, would require the most expert of chemists to determine. It has even been reported that their adulteration at the point of production has not been altogether unknown. Almost every form of refuse has been regularly incorporated in the ground spices and condiments. Corn-cobs have been ground into meal and feed and, powdered and stained, have been sold as cayenne pepper. Great houses have even gone so far as to distribute starch under the name of gluten for deadly use by people suffering with diabetes.

Some years ago the board of trade of one of our large cities arranged a dinner at which not one of the articles served was to be genuine. The beef was horse-flesh, the lard made of cottonseed oil, the butter was oleomargarine, the olive oil was from Indian corn,

the syrup was glucose, the coffee made of roasted old shoe leather, the whisky was one of the vile concoctions which have been legalized during the present administration, and the wines were based upon vinegar. One of the rules was that everything served must have been obtained through the regular channels of trade.

From my personal knowledge, I can say that many highly profitable lines of trade in exactly such products as those mentioned, and even in the manufacture of articles to be used as adulterants, were destroyed by the enforcement of this law.

Surely we may assume that no intelligent and disinterested person will longer deny the importance of some form of regulation of the collection, manufacture, and distribution of foods and drugs to the consumer.

CAN THE BUYER PROTECT HIMSELF?

Within the month, I have had a long letter from one of our large food distributing houses saying that it is wrong for such regulation to be undertaken by the government; that if his dealers in other articles cheat him, he is fully capable of taking care of the situation, and that the government should leave each individual to protect himself. It therefore becomes necessary for us to consider how this theory would work out in the trade in drugs and medicines.

We must consider the producer, one or more distributors, and the consumer. The collector of a natural product cannot of course control its quality, except by its selection or its preparation, which latter really borders upon manufacture, but he may dispose of it under false pretenses as to its quality. In the case of a potent drug, which is properly required to attain a specified standard, the detection of such a misrepresentation may be very difficult, requiring a skilled and trained operator. The large purchaser may reasonably be expected to possess this ability or to employ some one who does, and it may also be expected, in view of the large amounts that he handles, that he will find it profitable to make the necessary examination. The dealers at second-hand, among whom he will divide his original purchase, are obviously less likely to possess the required ability and facilities, and the expense involved imposes a relatively greater tax upon them, in exact

proportion to the reduction in the amount of business that each represents.

When we reach the retail pharmacists, the original lot may be divided among hundreds or even thousands of individuals. The probability that any particular one of them will possess the ability and facilities for applying the necessary tests becomes very much less than in the case of the original purchaser. Furthermore, did they all possess it, the necessity for the performance, repeated these hundreds or thousands of times, represents a very serious economic waste.

When we come to the ultimate consumer, that is, the patient, all these difficulties and objections become enormously multiplied. The percentage of these who are competent is infinitesimal. The large majority are too ignorant to realize the necessity of taking any action whatever. For this reason it is often said that they ought to suffer the penalty, but it must be remembered that the lives and health of these people is an important community asset, and that principles of political economy require us to look after them, even though they do not care at all for their own interests. If they did realize their needs, and if government failed to care for them, they might organize some private coöperative system, but failing this, a far better arrangement of government coöperation has been wisely resorted to, with highly beneficent results already manifest.

If we have found that no intelligent and disinterested person can sincerely claim that regulation is unnecessary, it seems equally clear that none can doubt the desirability of placing this regulation under government control. If there are any such it would seem paradoxical to find them among retail pharmacists, the very class upon whom must fall the ultimate responsibility for the neglect of proper regulation, or the enormous expense of labor in accomplishing it through multiplied individual action.

WHY SUCH APATHY?

But we must go a step farther and seek an explanation for the amazing apathy which exists regarding the maintenance and enforcement of this law. Its importance is so great and its benefits so mathematically demonstrable that it would seem as though every medical and pharmaceutical organization, every church

society, every grange and men's and women's club throughout the land would not merely indorse it and then leave it to its fate, but would appoint a committee whose special business it should be to keep track of its workings and report regularly concerning them. If there ever was a people's law which should be jealously guarded and fostered, it is the Food and Drugs Act.

Were this course to be taken, a number of astonishing facts would soon become generally apparent to our people. They would find in the first place that no matter how thoroughly the law might be revised and its imperfections corrected, by far the greater portion of its possible benefits for them must be lost unless the State and the town coöperated with the Federal government. To put it into concrete form, it may be said that unless the State of Vermont and the city of Burlington shall charge some local body with the responsibility of seeing that the benefits contemplated by the Federal Food and Drugs Act are secured to their people, under corresponding local laws, they are quite likely to fail to secure them.

They will find in the second place that if this Federal Law and its administration are not faithfully guarded and supported by them, it is quite likely to fall into desuetude or even to be repealed altogether. Be not deceived by the praise of mouth service that is accorded this law in many directions where the most firm determination to destroy it exists, and where active operations to that end are continuously engaged in. Inquire as to the real attitude of officials toward this law and as to whether they have financial interests in its abeyance. Inquire as to the position of Dr. Harvey W. Wiley and the conditions under which he is performing his difficult and painful duties. Inquire as to who are his enemies and why they are so. Investigate the attitude of some representatives of the daily press toward the enforcement of this law and unearth the influences which determine it. When you have done this, you will conclude that there is reason enough for vigilance and aggressive activity in promoting this important cause.

PROTECTION NEEDED ALSO IN OTHER LINES.

There is another subject, closely related to the administration of the food and drugs act,

and its pursuit depending largely upon the success attained in the latter, which is of far greater importance. In my opening remarks I said that upon the more general recognition of the principles underlying this law and upon the extension of legislation based thereon, depends in great measure the health and happiness of our people and the success of our government. If it is true that we should take community action in securing pure foods and drugs because the result is important and cannot successfully be secured by individual action, then it follows that the community ought to take similar action in other similar cases.

Think for a moment what this means. Let us take the one case of silk goods, their great variety, their numerous grades, the character of the coloring matters entering into them, and the variety and ingenuity of the methods of adulterating them, and we shall see that microscopical and chemical examinations requiring considerable knowledge and skill are required to purchase them with safety, unless we depend upon the reputation of the dealer, for which he is going to charge a handsome addition to the purchase price. Apply the same reasoning to the subject of jewelry, of which not one person in a hundred possesses enough knowledge to enable him to purchase with safety.

The same thing is true of rubber goods, of

clothing, especially of leather goods, and in fact of almost everything included among the necessities of life. Every pharmacist knows how many pitfalls there are in the trade of paints and oils. Reflect that the methods of adulterating and deceiving in all of these cases have received the most studious attention from experts who have spent their entire lives in the business, and that an equally expert knowledge is necessary to detect them. Then tell me what possibility there is that even one man can be found, among the most learned and intelligent in this entire country, who will possess such an expert knowledge in relation to all of the numerous lines of goods to be found in the modern household!

A PROPHECY.

I believe the time will come when the intelligence of the community will make clear the absolute inconsistency and folly of expecting every ignorant person to be capable of protecting himself in the purchase of such articles, and when it will establish legal regulations not only concerning their sale but concerning the enforcement of such regulations. Our food and drug laws are as yet experiments, and if we can but succeed in securing through them the benefits that were contemplated in their enactment, we shall then be enabled to proceed gradually and conservatively in extending these benefits to other fields.

A DISCUSSION ON THE LIQUOR QUESTION.

Verbatim Report of Remarks Made by Several Druggists at Two Meetings of State Pharmaceutical Associations—The Sentiment Strong Against the Illegitimate Sale of Intoxicants by the Pharmacist.

At the 1910 annual meeting of the West Virginia Pharmaceutical Association there was a very suggestive discussion on the druggist's relation to the liquor question. We are printing the remarks of the several speakers verbatim:

President W. W. Irwin, of Wheeling: We shall be glad to hear from Mr. Kreig on the liquor question.

Mr. Arch. Kreig, of Charleston: I did not prepare any paper, for I cannot write a paper, but I thought over a subject which was as-

signed me as to whether a druggist should be allowed any discrimination in the sale of spirituous liquors. It is a subject which appeals very strongly to me, inasmuch as people whom we know, and people who are good customers, and people who we know are going to use it right, apply to us to have a liquor prescription refilled. Also people who have no prescription apply to us because they are good customers.

The law gives us absolutely no discrimination in the matter, and says "you shall not sup-

ply spirituous liquors except upon a written prescription of a practicing physician in good standing, stating that such spirits are absolutely necessary for the person named in said prescription, and it is unlawful to make more than one sale on that prescription." If you supply intoxicating liquors in any other manner except under the conditions just named you are not only liable to a heavy fine and imprisonment, but you will be deprived of your license, may also be deprived of your certificate of registration, and you will not thereafter be permitted to be a registered pharmacist or to practice pharmacy in the State of West Virginia.

Now to convince you just how far-reaching the law is it is only necessary to refer you to the fact that yesterday the secretary of our board of pharmacy made a statement that he had made arrangements with 32 States for the exchange of certificates; if, therefore, a pharmacist is deprived of his certificate of registration he will not be permitted to practice pharmacy at all in the State of West Virginia, nor in any of the other 32 States, without passing the examination required for registration; and then it is a question whether any of these States would register a man whose registration had been revoked in his native State. That brings us to the point: Do we want to exercise any discrimination? Is it best for us to exercise any discrimination in this matter? I think not. I want to say that almost invariably our friends whom we consider our best friends often prove to be, in our efforts to uphold and obey the laws, *our worst enemies*, and you know this should not be true. Any man who asks me to incriminate myself should not be looked upon as a friend, but as an enemy, and the sooner we sever ourselves from such friendly (?) alliances and come out boldly and state distinctly where we stand, the better for us all!

Can we afford for the sake of friends, or for the sake of intended or proposed friendships, to suffer the sweeping penalties which the laws impose?

Now regarding the benefits of these laws. Personally, I believe the laws are right. I also want to place myself on record as saying that I believe the laws are best for every pharmacist—both for the pharmacist who has a sincere desire to do right and obey them, and also for the pharmacist who would be dis-

posed to place a liberal construction upon them, and discriminate in favor of his friends. The law places a pharmacist in such a position that he can say "No" with good grace; and he can say, "This is the law and I cannot violate it."

In Charleston we had the law printed and we circulated copies of it among our people calling their attention to its sweeping penalties. To those who still insisted we said that we could not afford to incriminate ourselves for the sake of a few dollars; for with such people dollars and friendship go hand in hand, and I hope no member of this association would be willing to sacrifice his professional honor for either dollars or friendship.

Another thing; I believe the time is past when whisky and intoxicating liquors will occupy a place of any great importance in the *materia medica*. I believe there is and always will be something that will take the place of whisky in sickness. We can all recall numerous cases of friends who are dear to us, to whom whisky had been given in case of sickness with results that have been very disappointing not only to ourselves but to the physicians, and there is no doubt in my mind that if the sale were absolutely prohibited we would be far better off as a profession and the people would be far better off as people. I would favor absolute prohibition. (Applause.)

I would favor it first as a benefit to the people, because this is very important, and secondly as a benefit to the physicians, and lastly as a benefit to the profession of pharmacy in general. To us who are pharmacists this is of paramount importance, for we should regard the upbuilding and the uplifting and the honor of our profession next to our own honor! (Hearty applause.)

Mr. Geo. W. Keller, of Huntington: I would just like to say that I heartily indorse what Mr. Kreis has said, and I would go just a little further in regard to what we should do so far as the selling of whisky in a drug store is concerned. In the first place I will relate the experience I have had in a little town where I was manager of a drug business for four years. I found two drug stores in the town on my arrival, and soon discovered that both had the reputation of selling whisky. In fact, they were almost as bad as saloons. I will add, too, that in my entire experience I had myself never known what it was to dis-

pense even the smallest amount of whisky in a drug store.

As soon as I took charge of the place I immediately put forth every effort to eliminate whisky entirely. While this required some little time we did eventually succeed and did not have an ounce of whisky in our store. In the course of a few months two of the physicians requested us to keep a small amount of whisky in stock. We complied with this request and did keep just enough to meet their demands. This however was so small that it did not even enter as a factor in the business one way or the other. The year previous to my taking charge the sales showed a total of about \$10,000, a good portion of this business being obtained through the sale of whisky. At the end of four years from that time we were doing a total business of about \$16,000 with practically no whisky! This certainly shows that whisky is not in the least necessary in order for a man to remain in the retail drug business, and I am only relating this experience with the hope that any one who may be so situated as to think that he is compelled to sell whisky in order to remain in business will be convinced of his error.

I know it is rare to find a pharmacist who starts in the retail trade with the avowed intention of making the sale of whisky his main business. As Mr. Kreig has stated, he is led into his first sale by the entreaties of his best (?) friend. Again and again this best (?) friend prevails on the good-natured pharmacist to accommodate him until finally his conscience becomes seared. Finding the money coming so easy, he soon yields to the temptation of making the sale of whisky an important feature of his business, thus becoming liable to trial in court and the deplorable results that may follow, and also having disgraced his professional standing.

I will add also that I am not a prohibitionist. I do believe in the legitimate sale of whisky so long as it is made and sold from the place that pays a license and is known as a saloon. We look upon the pharmacist as having engaged in one of the best professions, but when he stoops to the illegitimate sale of whisky we cannot have the same regard for that man. I am in favor of our State association placing a resolution on record that we are absolutely opposed to even permitting

whisky to be carried as a portion of a drug-store stock.

Mr. Walter E. Dittmeyer, of Harpers Ferry: I heartily agree with what has been said by the preceding two gentlemen, but I may add that it is not only liquor that is sold unlawfully but other preparations such as Jamaica ginger, compound tincture of cinchona, and drugs of like nature, and I believe that if possible the sale of Jamaica ginger should be restricted to, say, one ounce at a time. I know from experience at home that there are fellows running around all day Sunday hunting this class of stimulants, but as we always refuse to supply them it is a pleasure to me to see them walk up to the fountain and drink soda water and phosphates instead.

[In addition to the foregoing expressions of opinion at the West Virginia meeting, it may be interesting to quote the remarks contained in the address of the president of the Vermont Pharmaceutical Association:]

A. L. Cheney, of Morrisville, Vt.: This is the most important problem before the drug trade to-day. Something heroic and systematic must be done if great and lasting harm to the welfare and dignity of pharmacy is to be avoided.

The tide of temperance reform has swept onward during the last year and everywhere the forces are lined up.

During the year the reputation of pharmacy has been dragged in the mire to a degree which sickens the heart of every earnest lover of the profession. Druggists have been prosecuted in almost all the "dry" sections of our country for selling liquor illegally.

It is high time for us to wake up and look this gigantic evil squarely in the eye and take the necessary steps to acquaint the public with our position on this question. Our position must be taken in a decisive manner, and I believe we must come out squarely against the liquor business and absolutely refuse to handle it in any manner whatsoever.

And now, Brother Druggists, here at this meeting, it is straight up to us individually, as never before. Now and here is our opportunity to place ourselves on record, and set ourselves forever right in the eyes of our beloved State.

This coming fall our legislature meets again, and something is going to be done with

this liquor question. Would it not be well for the druggists of this State to come out squarely against having anything to do with it? If there are any druggists in our State who cannot conduct a drug store without selling liquor, let them get out of the drug business,

but let's not have it said that any of us is conducting a drug store for the purpose of selling liquor.

If the public must have some place where it can purchase liquor, let it furnish that place, but do not have that place the drug store!

FOUR DRUGGISTS DISCUSS WINDOW TRIMS.

All Deem Them of Real Value to the Business—They Give Their Views on the Essentials of an Effective Display—Several Lines are Mentioned as Being Especially Adapted to the Purpose—How Long an Exhibit Should Last, and Other Points of Interest.

LOREN D. LARKIN, GLENS FALLS, N. Y.

We allow our displays to remain two weeks. Having two windows we change one each week, usually on Thursday. We clean both windows each week; so we have fresh, clean windows for Saturday.

We display all kinds of goods usually carried by a drug store except fancy articles in delicate colors which are apt to fade in a strong light.

In warm weather we keep the flies out of the windows by means of netting; so we have no trouble with goods becoming fly-specked and disfigured.

LINKING WINDOW TRIMS WITH ADVERTISING.

We are using M. P. Gould Co.'s advertising, "The Monthly Pharmacist," and are careful to arrange a display of goods advertised in the "Pharmacist" about the time the papers are distributed. If we are advertising anything special in the newspaper, we always have a window display to go with it.

The essential characteristics of a good trim are, first, clean glass, then clean paper, cheese-cloth, or whatever is used to cover the bottom of the window. We use figured crêpe paper entirely for our displays, for it is inexpensive, and being made in so many colors and figures, allows a good variety to the trims.

One of the main essentials of a good trim is to build it up so as to catch the eye of the passer-by, for that is the object of the trim. So many make the mistake of laying a display flat on the floor, and it does not attract the eye. Another essential is not to overcrowd the trim. We are careful to display only one

class of goods at a time and not to confuse the eye by a profusion. The most effective displays are often very simple, and sometimes very few articles are used.

Window displays certainly do pay as we have proven time and time again. Once we sold a gross of a certain kind of stomach tablet with which a little night lamp was given away. The twelve dozen went in a little over four days, a sale accomplished almost entirely by the display. At another time six dozen boxes of tablets with which a cuckoo clock was given away were sold in two and a half days by the same means.

In a good many instances where a display has not seemed to be very successful in direct results, the influence of the trim has been felt for weeks after the trim was taken out.

J. EARL TAYLOR, PH.G., GRIDLEY, ILL.

In most localities where my lot has been cast as a clerk, the ideas along "cleaning and trimming" the window were in a measure limited to the suggestion that comes from the one word "Friday." Friday seemed to be the day for a general cleaning up and arranging of the window display. It seemed to be set aside as the *one day only* for that work. I presume the idea of having a "set" day was that the business was more pressing on Saturdays, and that it was necessary to have things brighter and more attractive for the larger crowds of Saturday shoppers.

In a way, a set day is a good thing; but in the last few years I have taken an altogether different view of the matter. If I

trimmed my windows once a week, I presume I should adhere more strictly to the Friday idea because it has undoubtedly a strong feature. But for a long time past I have given more consideration to "conditions" than I have to "set days." The reasons are these: The first point in our window must be cleanliness; if you cannot have that you had better, as the saying goes, let the tail go with the hide, and do nothing. I believe one of the most disgusting things is a dirty window. If you don't keep the visible window clean you cannot expect your patrons to suppose that the invisible is clean—your work bench, your utensils, etc. Is it not true? Coming back to my first point, the condition of cleanliness is my chief factor. Should I have a trim in the window and it requires a change to be kept in good order, then it is changed.

Another thing, I believe in considering timeliness in the trim, special features, etc., including seasonable trims, special town functions, show days, athletic days and all conditions that give the druggist an opportunity to use the window to financial advantage. Many times our windows are changed simply to assist a home benefit, without any regard to the money returns whatsoever, simply to contribute to the cause. There are things, of course, that money cannot buy, and one of them is unselfishness to an honorable cause; so right here let me say—don't always pay attention to the direct returns on every window that you construct.

WHAT KIND OF GOODS TO DISPLAY.

The class of goods that we show in our trims are, for the most part, as nearly as possible, seasonable articles; but often one cannot show these because of the deterioration they undergo from the dust, sunlight, flies, etc. I enjoy working with box stationery, perfumes, etc., combs, brushes, tooth-brushes and toilet articles, but one must necessarily exercise extreme care because of the loss in spoiled goods. The summer months offer excellent opportunities for displays, but they are destructive to the stock in many cases. When it is hard to put in a trim on this account, I look to featuring articles that can either be cleaned without injury or that suffer but little from exposure. Feature pocketbooks, paper napkins, magazines, stock preparations, paints, fly preparations, insect powders, fruit preservatives, etc.

One thing we always keep in mind is to feature articles that yield a profit—not just the first thing that comes along—for the profits must defray the expenses.

Preparations of our own we "boost" through the medium of our silent salesman. We show goods of manufacturers, too, if they yield a living profit and the houses assist us, by free electrotypes, newspaper locals, window cards, cut-outs and easel displays. We try to work to a mutual advantage in this class of merchandise. If the manufacturer will not help, then we have "cramps" too; that's fair, isn't it?

We always connect our window displays with newspaper announcements on profit-payers and seasonable stuff. On our general trims we don't always use the assistance of printer's ink, but confine it more to specials, etc. For instance, there is the Kreso Dip made by Parke, Davis & Co. We have used both window and newspaper to exploit this product. To cite another instance: Hess & Clark stock; still another, Christmas goods; and, at the present time, our display of valentines. I could name many many other specific instances that have been winners, could I but call them to mind.

THE ESSENTIAL THINGS.

In my opinion the essential characteristics of a good window trim are these:

1. Cleanliness. This I have already mentioned.

2. The two features necessary to attract attention: the far and near perspective. The former depends upon the object, on attractive features that are large enough and important enough to draw the attention of the observer across the street. The near effect is intended to clinch a sale when the observer realizes the importance of the suggestions shown.

3. The price card. A neat, attractive trim is lame unless, after showing the strong features in the goods displayed, the price appears in conjunction with the merchandise.

4. The strongest characteristic I can think of, as an only feature outside of cleanliness and price cards, would be the mechanical effects. Nothing so attracts people as "motion" trims, and wherever I can I am using them.

When the above four characteristics are embodied in a window trim there simply must be an increase in your business!

DISPLAYS PAY.

Do window displays pay? How can anybody gainsay it? I have heard of men who in calculating the value of a window set off against the sales from the window the rent of the floor space which it occupies. To the average man that is all bosh. Why? Simply because your direct sales are *not* your criterion! They are *not* your actual sales. They are your direct sales, but how about your indirect sales? It would be next to impossible to figure the asset that your trim is to your business if handled judiciously. Here are a few specific instances of window displays that paid; they were written up in the BULLETIN as follows:

Rubber Goods, BULLETIN OF PHARMACY, January issue, 1911.

Stock Dip Display, BULLETIN OF PHARMACY, October issue, 1909.

Our own Cold Cure, BULLETIN OF PHARMACY, March issue, 1909.

Dead Stock Article, BULLETIN OF PHARMACY, August issue, 1910.

Euthymol Display, BULLETIN OF PHARMACY, October issue, 1910.

Christmas trim 1910 was a decided success, which I shall try and describe in a separate article before next holiday time. We could name a good number, had we kept record, that have paid us well for our efforts.

In recapitulating let me say that people judge a store by the windows to a large degree. The best thing to do is to put forth every effort to better your window conditions. We know it pays because we have proven it.

**P. I. MINTON, WITH L. W. RANDOLPH,
PLAINFIELD, N. J.**

We make it a rule to wash and trim our windows every Friday lest they should become dirty or soiled from storm or other cause. We always have them cleaned and retrim them.

We *never* put the same trim in a window twice; but having two fine display windows, we sometimes reverse and rearrange them.

GOODS DISPLAYED.

We generally display our own preparations and those for which we are sole agents, with the exception of baby foods, surgical goods, soaps, toilet articles, and a few well-known preparations, as Gude's Pepto-mangan, for instance. About twice a year we put in a beauti-

ful display of fresh fruits, advertising our soda drinks of pure fruit syrups. We also have appropriate displays for all holidays.

We do no newspaper advertising.

It has been my experience that a good window trim is based upon the following:

1. Neatness and harmony.
2. Not too much in windows—crowding spoils the effect.
3. Display one line of goods at a time.
4. Have neat signs placed on or around the goods displayed. We never plaster our show windows full of window strips.

A WINDOW DISPLAY OF CHOCOLATE ALMONDS.

By all means we *know* our window displays pay. For instance: Hallowe'en we put in a new display of Apollo Butter chocolate almonds in our window with a neat placard reading: "*Special Malinee candy, 15 cents a package.*" In the center of this trim we had a huge pumpkin with a Jack-o'-lantern face cut into it. We then covered the eyes, nose, and mouth with red tissue-paper. Inside we connected an electric bulb and put it into the pumpkin from the back, so that the cord could not be seen from the outside of the window. We also diffused our window lights with red tissue, thus making a very beautiful effect. This display attracted much attention, people even coming back across the street to see what we had displayed. It did not take very long to sell a gross of packages.

A BARREL OF ROCK CANDY.

Again: This winter we bought a barrel of rock candy (assorted red, white, and yellow). This we put into a window on the side and let the candy spread over the foreground, with a backing of half- and one-pound packages. Upon this we had a neat sign reading: "*Special, pure rock candy, 15 cents per lb.—1/2-lb. for 8 cents.*" We sold the barrel in about two weeks.

I could mention many other instances where we have sold goods through window displays.

M. NOLL, ATCHISON, KANSAS.

We change our window trim once a week, Wednesday being the time selected. Our displays include such items as toilet articles, rubber goods, patent medicines, and seasonable merchandise. In trimming a window, we aim

at uniformity, harmony of color, and artistic effect in the grouping of goods.

We try to call attention to our window display in the local newspapers in connection with the ads. that we run at the same time.

I am a firm believer in good window displays. On more than one occasion we have found they produce results. We have sold as high as four to six dozen of a fifty-cent article that was practically unknown before. In a

town of 16,000 that is pretty good work for a week.

We photograph all our windows and file the pictures. They prove suggestive later when the window trimmer wants ideas. In the last eighteen months we won several first and second prizes in window trimming, which alone paid us well for our trouble. Last but not least is the general prominence given to a store by the windows.

THE DRUGGIST AND HIS PROFITS.*

How One Firm of Pharmacists Deceived Themselves about Their Earnings—The Importance of Knowing the Actual Facts about One's Business so that Conditions May be Bettered when Necessary.

By HARRY B. MASON.

There is no doubt in my mind that the profits of the average druggist are not what they ought to be. The professional joke-writer who assumes druggists and plumbers to be modern hold-up artists, and who believes that their only superior is the Standard Oil Co., ought to revise his information and bring it up to date. Notwithstanding his occasional use of the same old sophistry, I stand on record as declaring that the pharmacists of the United States ought to make more money.

A TYPICAL CASE.

Now just to make clear what my contention is, I want to comment with some little detail on the case of a Southern firm of druggists—just one case out of scores that I have been made familiar with during the last few years. This firm comprised two partners. After they had been in business a year they submitted an annual statement to the drug journal with which I am connected. They did a business of \$22,744.57, and all through the year they thought they were making handsome profits. At the end of the year, however, after they had taken inventory, and made calculations as best they knew how, things did not show up quite as they had expected.

They selected us as father confessors and

made a clean breast of it. Why hadn't they made more money? They boasted that they handled a good line of sundries and realized an advance of 100 per cent on the cost of nearly everything. They had enjoyed a good holiday trade and marked everything at 100 per cent. They had filled 5629 original prescriptions and refilled about one-quarter as many more, making a total of nearly 7000 prescriptions altogether. On this prescription business the profit was 425 per cent based on cost! Other facts like these they told us about their profits, and they remarked that they did not believe there was a store in the State getting better prices than they were able to obtain.

Why, then, weren't they able to produce more filthy lucre at the end of the year when the business was figured up?

We examined their statement with some care, and we arrived at the inevitable conclusion that our Southern friends were not making anything like such profits as they fancied. This information was a startling surprise to them, but it was a fact which could not be escaped. We discovered that the total gross profits of the year amounted to \$7083.35. Dividing these profits by the sales, we found a percentage of gross profit of only 31.1! The expenses were 24.7 per cent, and thus a net profit was realized of less than 7 per cent! This is too small for *any* business, let alone a

*Read before the Michigan State Pharmaceutical Association at Battle Creek in June.

trade conducted where such good prices are obtainable as in this case.

DECEIVED REGARDING THEIR PROFITS.

These people thought they were making large profits on all their goods, but by their own figures we convinced them that, on the contrary, they were only realizing average returns of 31 per cent based on the sales, which means 45 per cent based on cost figures. They ought to have made 40 per cent on the sale figures, or $66 \frac{2}{3}$ on the cost. They talked about getting 100 per cent advance on a good many things and something better than 400 per cent on prescriptions, and how these profits were pulled down to so low a *general* average was beyond our ability to determine, not being in possession of the detailed facts of the business in all of its aspects. A large number of things, like patent medicines, for instance, must have been sold at a very low margin, or even at a loss, when consideration was taken of the cost of doing business.

The real result was that each of the two partners got about \$1200 in net profits, which, added to a salary of \$1000, made his total earnings \$2200. You will all agree, I am sure, that this was certainly an insufficient income from a business of such a size and character, selling practically \$23,000 worth of goods a year, and located in a place where excellent prices were obtainable. It is still further to be remembered, too, that nothing had been written off for bad accounts or depreciation in stock and fixtures, and that if these things had been taken into consideration the yield from the business would have been still further reduced.

The plight in which this firm found itself is distressingly similar to what hundreds or perhaps thousands of pharmacists would discover if they were only equally faithful in keeping tab on the figures. We have found this condition of things over and over again in examining the annual statements of druggists. Many a man is making far less in the drug business than he thinks he is. He reasons that because certain things like prescriptions yield him a large profit, he is doing pretty well on the whole. As a matter of fact, many articles like patent medicines are frequently sold at a very small profit, and perhaps even at a loss, when the percentage expense of doing business is taken into account. The more unprofitable

trade of this sort a druggist does, the more his *average* gross profit is pulled down to a surprising and embarrassing degree. I have often pointed out, for instance, that cigars, candy, and soda do not yield anything like the profit which most druggists believe, and that a careful accounting in these three departments ought to be conducted.

WHAT OUGHT TO BE MADE ON PRESCRIPTIONS.

I have referred to prescriptions, and I have spoken of the handsome profits presumably realized on them by this firm of Southern druggists. But I want to say now that although the prescription department is supposed to be the star profit maker for the druggist, it does not yield the returns that it ought to. Most druggists really haven't got nerve enough to charge good prices for their professional services. Many of them, too, are afraid that when a prescription is refilled it will be carried down the street and a lower price given on it by a competitor. We are always so fearful of what the other fellow is going to do!

Two or three years ago a druggist out in Arkansas submitted the following prescription to us and asked us to give a price on it:

Potassium iodide (Merck's).....	1½ ounces.
Fluidextract of sarsaparilla (P.	
D. & Co.).....	2 ounces.
Fluidextract of burdock-root	
(P. D. & Co.).....	1 ounce.
Simple syrup	2 ounces.
Water, enough to make.....	8 ounces.

Mix and direct one teaspoonful to be taken after each meal.

Instead of ourselves estimating what ought to be charged for this mixture we published it and asked our readers for their opinions. There were four responses. Two men suggested \$1.50; one declared that \$1.35 would be his charge; and the fourth man mentioned a price of \$1.00. In other cases of the same nature we have found the differences to be even greater, and after many years of observation I have come to the conclusion that the druggist is afraid to charge what he ought to get for his prescription services.

BIG DRUGGISTS GET GOOD PRICES.

In the large cities there is often the fear that the price will be cut by the big downtown stores. On the contrary, however, I do

not think my statement can be challenged that the so-called cut-rate druggists get better prescription profits than the average man. George B. Evans in Philadelphia, who, as everybody knows, has five big stores doing an enormous business, has for years carried out the following policy of pricing prescriptions: an advance ranging between 50 and 100 per cent is realized on the cost of the supplies, and a dollar an hour is charged for the time of the dispenser. Some such rule as this is observed by nearly all of the large stores in the country, and frequently the rate of profit is even larger. These men know to a cent what it costs them to transact their business. They realize what profits must be yielded to make their capital and their time properly remunerative. As a result they do not hesitate to get better prices often than the rank and file of retailers—not only better prices for prescriptions but also for counter goods. If they cut at all it is on patents and other things with established selling figures where a reduction makes a strong impression on the public.

To illustrate again that the big fellows are not afraid to charge good prices, let me cite an incident of three or four years ago where three ounces of cream of tartar were purchased at retail by government inspectors in Canada, and where the price had ranged from 15 to 50 cents! Was it the large dealers who charged the 15-cent price? No! One wholesale house and one department store charged as much for a single ounce of the substance as most of the retailers got for the three ounces!

Every time you will find it the rule that the man who gets the best prices is the man who keeps careful business records; who knows to a cent what his percentage of expense and his percentage of profit are; and who realizes what he must do to come out right at the end of the year. The low-priced man is the one who doesn't know these things, and who fancies he is making a good deal more money than he actually is.

THE IMPORTANCE OF BUSINESS RECORDS.

Every retail druggist in the country ought to keep careful tab on his business. He ought to devise and follow faithfully a system of records showing his purchases, his expenses, and his sales. With these figures available, he can tell at the end of the year

just what his percentage of expense is and what it costs him to sell every dollar's worth of goods. He can also tell what his percentage of profit is, and he can be in position to understand whether or not he has been fooling himself all these years, and whether he is making as much money as he ought to make. These figures must of course be checked up invariably once a year by an annual inventory, for no merchant, druggist or otherwise, can with any accuracy keep business records unless they are corrected by inventory fluctuations. The whole thing falls to the ground without this support. In addition to this, I believe that every druggist ought also to follow the same method in detail with his leading departments like those devoted to soda, cigars and confectionery. You cannot know too much about your business!

THE SAVING FROM DISCOUNTING BILLS.

Closely related to this question of making adequate profits is the question of cash discounts. For if a dealer can cut down the cost of his goods he is certainly adding that much to what they yield him on sale. I fear that most druggists do not avail themselves of their cash discounts as they should. They do not seem to realize how much money they can save in this direction. To get at the facts approximately, I recently picked out seven pharmacists who I knew discounted all their bills, and I asked them what the economies amounted to. Here are the respective sums: \$150, \$186, \$301.26, \$600, \$600, \$1000, \$5000. These are the amounts of money which the seven druggists saved last year alone by taking advantage of their cash discounts! Isn't this a convincing object-lesson?

Many druggists excuse themselves on the ground that they haven't sufficient ready capital. Note what one of my seven correspondents had to say on this point. He had started in business many years ago with a strong determination to discount all bills. Finding himself in the early days without enough ready money, he went to the banks for accommodation. During the first ten years, when the business was yet rather small, and when consequently he needed to make as much as he possibly could, he saved a total of \$2646.26. In the meantime he had paid the banks for interest on borrowed money only \$92.50!

Can anything be more eloquent than these actual facts about one druggist doing an average business in an average town?

IT'S UP TO THE MAN HIMSELF.

I have just been looking over some figures collected by Bradstreet the last year. What do I find? This, that four-fifths of all the failures in business are due to the men themselves! Bradstreet classifies the causes very carefully into incompetence, inexperience, lack of capital, unwise granting of credits, neglect of business, personal extravagance, and so on *ad libitum*, but the important point is that

merchants can blame external conditions for only one failure out of five. The other four times are up to the man himself! What is the lesson to be drawn from this statement? It is this: that the average dealer doesn't know until it is too late what his business is actually doing for him, or failing to do; that he doesn't keep a careful record of the facts; that usually he thinks he is making a good deal more money than he actually is; and that, so far as the retail druggist is specifically concerned, he is not ordinarily making his store yield him the income which he ought to obtain from it.

A WINDOW DISPLAY OF DRUGS.

J. Leon Lascoff, of New York City, is a well-known pharmacist of the professional type, and now for a year or so has been a member of the New York State Board of Pharmacy. Mr. Lascoff places emphasis upon the really pharmaceutical element of his busi-

ness wherever possible, and we are showing a window display recently devised by him to exploit the sale of botanical drugs, and more particularly to call attention to his prescription business. Along the front of the window is to be seen a long line of drugs, exhibited in



ness wherever possible, and we are showing a window display recently devised by him to exploit the sale of botanical drugs, and more particularly to call attention to his prescription business. Along the front of the window is to be seen a long line of drugs, exhibited in

83d Street and Lexington Avenue, beginning with R No. 1." The location here mentioned was the one occupied by Mr. Lascoff for many years. His new store, which is near-by, is only a year or two old.

A pretty good record!

DRUG-STORE SKETCHES

ALGERNON DISCOURSES ON THE SUBJECT OF DRUG-STORE HUMOR.

BY CLEO C. LONG.

"I'm going to write a book," announced Algernon on a bright spring day. "Personal memmores, you know, entitled 'Foolish Questions Asked in a Drug Store.' This certainly is the place to hear 'em alright, alright."

"Now you're shoutin'," agreed the soda-fountain boy. "The fool ginks that come in here and ask me fool questions in just one day would fill the directory. A guy blew in yesterday, and sez he, kind o' kiddened me, you know: 'Son, what's good for a case of indyspepsia?'"

"Thinks I, 'If he's a kidder he can't catch me off the job,' so I sez: 'Well, a cucumber is always good for a case of indyspepsia, but we're out of 'em right now. I think a little ice cream soda with fresh shrimps would do the work for you all right,' sez I, as chipper as you please, and do you know that gazabo got as mad as a hornet, and it was only the fact that the boss was out of the store that saved my job."

"You may get canned for it yet," said Algernon soothingly. "He's liable to write to the old man about it. Take it from your Uncle Algy that it never pays to get funny with these witty customers. They give me the pip. Did you ever know of a single solitary individual who could buy moth balls without acting funny about it? What's so darn funny about a moth ball I'd like to know; and yet every soul that ever bought one'll say: 'I see the ball season's opened again; guess I'd better have a few,' or 'Did you ever attend a moth ball?' or 'Did you ever hear a moth bawl?' or 'Gimme a few of those big white pills,' or some such rot. Then you're supposed to let out a peal of merry laffter as if it was a brand-new crack. Gee, if any man, woman, or child ever comes to me and states in plain speech, 'I'd like to have a pound of moth balls,' the shock would probably land me in a padded cell!"

"Not a chance of it," asserted the soda-fountain boy. "They even come and ask me for moth-ball cocktails, you know. Some one does it every day. The sight of a moth ball

is very inspirin' to the funny fellers. They all have to take a crack at it."

"Yea, even so," assented Algernon. "But after all they are no worse than people buying bedbug poison. They don't like to mention it, you know. They look around till they see it somewhere and then say, easy and careless like, as if it was an afterthought, 'Oh, by the way, I believe I'll take a bottle of this!' as if it might, by some remote chance, come in handy some day—when there was unexpected company. And half the time they'll ask how to use it, as if they had never used it before, or even heard of it. Nine times out of ten they'll say, 'I never saw a bedbug in all my life; we never had one in the house, but I use this for roaches,' as if roaches was something to be proud of! Speakin' of roaches, did you see the large colored dame that came in for roach paste this morning?"

"Sure, she seemed to make a hit with you," said the soda boy. "You dashed out of the door after her and waved your hand and watched her out of sight. Got a date?"

"Cut it out," said Algernon sternly. "She's the Wilson's cook, but she neglected to tell me so. She asked for roach paste or rat paste or something that would 'kill off all the varmints on the place.' I brought out some paste, and she wanted to know if it was any better than that powder stuff she'd been using. 'The varmints jes' thrive an' git fat on that powder,' she said; 'I tried it on the rats in the stable and the roaches in the cellar and the ants in the kitchen, and they all jes' come 'roun' an' beg foh mo'."

"I assured her that the paste would certainly put them all out of business. 'Why, a rat will sicken at the very sight of this paste, smeared on a cracker,' I said, 'and yet there's a strange fascination about it that attracts him, and he won't be happy till he gets it. The first nibble and he's a dead varmint.' I also told her how one little smear of paste would lay low a whole army of roaches and put millions of ants on the blink if they even got a smell of it. So she said she'd take a box, and she started out 'of the door with it. 'Jes' charge it, mistuh,' she said."

"'Who is it for?'" I asked.

"'Foh de Lawd, I done tole you it's foh de varmints! D'you all think I'm gwine ter pizen my ole man—not but what he needs it!' and she got away with the goods, too! I found

out afterwards that she was the Wilson's cook."

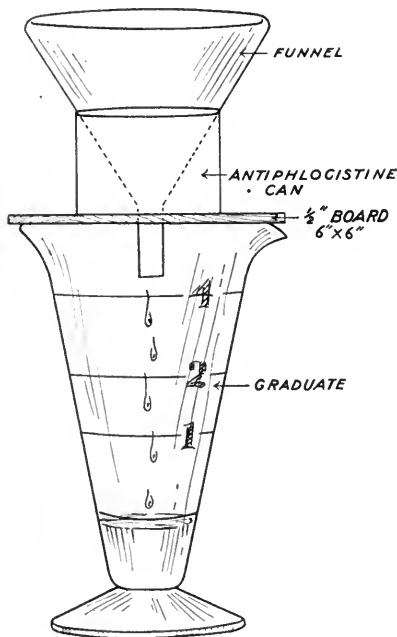
At that moment a customer entered, a middle-aged man of genial aspect, who assumed a jocular manner and thus addressed himself to Algernon: "I'll tell you, young man," said he, "this weather makes us all feel like playing marbles, doesn't it? Just give me a dime's worth of those nice white boys there," indicating the jar of moth balls.

And Algernon smiled a sickly smile as he deftly weighed out the desired quantity.

DOLLAR IDEAS

AN INGENIOUS FUNNEL REST.

Ralph F. Boris, Sedalia, Mo.: The accompanying etching represents a good device for supporting a funnel above the liquid when filtering into a graduate. This is much



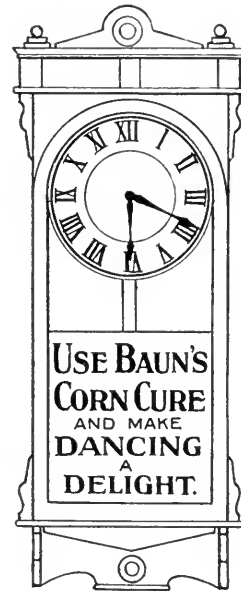
handier than the ordinary iron funnel stand with rings sliding up and down on a rod.

I use an Antiphlogistine can, 50-cent size, first cutting a hole through the bottom of it, about $\frac{3}{4}$ of an inch in diameter. Then I punch three small holes for tacks in the bottom around the large hole and tack this to a tough half-inch board, having a corresponding three-fourths-inch hole in the center. The board used is about 6 by 6 inches. This will support any ordinary funnel that may be used

with a graduate and will keep it in the correct position to prevent liquids from spilling or rising above the filter paper when the funnel happens to tip.

THE SIGN ON THE CLOCK.

Charles F. Moyer, Slatington, Pa.: To increase your sales of corn cure, or any other specialty, try this scheme: Attach a show card to the lower end of a clock as shown in the accompanying illustration. Then set the



timepiece in the window where the people passing by can see it. The sign will receive due attention. Every time one looks to see the hour, he must read the ad. The preparation mentioned receives a good boost and the sales increase considerably.

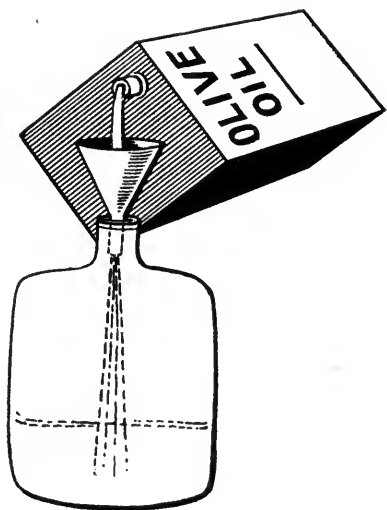
BOOSTING A SPECIALTY.

O. P. McPherson, Gloster, Miss.: Here is a scheme I just tried. There was a show in town, the admission being 10 to 25 cents. All the "kids" wanted to go; so to help the little fellows I called in three boys (the 15-cent size). "Bud," said I, to one of the boys, "do you want to go to the show?" "Yes, sir," he replied. "Me, too!" "Me, too!" chorused the other two in unison. "All right, boys, we shall all go. Take this bottle of McPherson's Celery Compound, sell it for \$1. Keep 15 cents to go to the show." In less than ten minutes I had out a dozen boys selling celery compound. All worked hard. Nine

boys sold their bottles; three failed, but we all went to the show. The celery compound cost me \$5.50, plus 15 cents a bottle for selling, making a total cost of \$6.85. I got \$9.

POURING OIL OUT OF A FLAT-TOP CAN.

J. Weis, St. Paul, Minn.: It is amusing to see dealers when pouring oils or other liquids out of a flat-top shipping can, spill much of the stuff because they do not know the proper way of doing it. How gratifying it is to note the surprised look on their faces when they are shown how to empty the container with-



out spilling any of the contents! The trick is simply to hold the can so that its pouring hole is at the *top*, as shown in the illustration. This will give the can all the air it needs and prevent gurgling and splashing.

A QUICK WAY OF REMOVING LABELS.

Hugh M. Reid, Chicago, Ill.: The quick removal of labels is often necessary in any pharmacy, as prescriptions are frequently received which call for an original bottle of some proprietary medicine and it becomes necessary to remove the manufacturer's label and substitute a prescription label. Again a container with a soiled label is returned and the old label must be removed quickly. Much valuable time will be saved if, instead of soaking the bottle or scraping the label off with a spatula or knife, one will use a bit of steel wool. An instant's rubbing removes the label. The same treatment will be found of value in removing stains from mortars, graduates, etc.

FOR WRITING THE PRESCRIPTION ON THE LABEL.

Paul L. McConomy, Philadelphia, Pa.: We have several physicians who always ask that the prescription be written on the label of the bottle. To copy it on an extra label means that the prescription bottle will have two labels—one for the regular directions, and the other for the prescription itself. This is rather unsightly, so I got up a label on which there would be room for the whole thing. Of course this is only for liquids. I may explain

PAUL L. MCCONOMY		
DRUGGIST		
S. W. cor. 20th and Callowhill Sts., PHILADELPHIA		
For _____		

_____ Dr. _____		
No. _____	Mo. _____	191 _____

that we have this type of label in two sizes—one for large mixtures and the other for smaller ones. They are convenient and neat. The larger of the two labels I use for any prescription containing over three ingredients, and the smaller one for those having three ingredients or less. [One of the two prescriptions is shown in the accompanying reproduction.—THE EDITORS.]

PREPARING BASHAM'S MIXTURE EASILY.

P. I. Minton, Plainfield, N. J.: We have a little framed card upon our prescription counter as follows:

	500.0 Cc.	250 Cc.
Ammonium carbonate.....	12.5	6.25
Acetic acid.....	280.0	140.0
Tincture of ferric chloride.....	20.0	10.0
Simple elixir.....	60.0	30.0
Glycerin	60.0	30.0
Aqua q s.....	500.0	250.0

This makes a strictly U. S. P. product and you always have the formula before you. Simply compound the mixture in the order given.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MORE ON THE TEN-HOUR DAY.

To the Editors:

Having read Mr. Burton L. Bennett's article on the ten-hour law in your May number, I would like to say a few words. I am not a clerk, but have been until the past year and am able to see both sides.

As to Mr. Bennett's argument about fixing hours, why can't his clerk open at 8 A.M. and work till 12 M.; return at 1 and work till 6 P.M.; and then return to work from 7 to 8 P.M.? On Sundays let the proprietor keep open a couple of hours in the forenoon.

As to the clerk putting in only 60 per cent of his time while the store is open, I say that is enough. If you are going to keep the store open from 9 to 12 o'clock at night, let the proprietor stay there himself a while and he will begin to think ten hours are enough. I am sure a drug clerk does not compare with a benchman, as Mr. Bennett says, in either hours or pay. A benchman receives from \$4.00 to \$5.00 a day for eight hours, and a drug clerk \$3.00 or \$3.50 for ten to fifteen hours. I know also that working at a prescription counter and waiting on people all day are hard work. I have been told by druggists who have labored on farms before coming into the drug business, that plowing was neither harder work nor more tiring.

Now as to the proprietor, he is in and out all day attending to details and sometimes is away on pleasure. He can take from one to two hours for meals with no apologies to any one. If there is any time for any one to read or chat with customers, it is usually enjoyed by the proprietor while the clerk does the work. If there is anything special going on, the proprietor usually goes and the clerk keeps shop.

I believe the proprietor should have some privileges, but I also believe in a clerk getting out of the store before everything in the entertainment line is over. F. A. MOREHEAD.

Watsonville, Cal.

To the Editors:

In the May issue of the BULLETIN OF PHARMACY, in the department of "Letters," I endeavored to call the attention of pharmacists generally to the so-called "Ten-hour drug-clerk bill," introduced in the present Connecticut legislature. It is quite possible there may be some interested in the fate of that measure.

The bill as introduced received rather favorable attention from the Labor Committee, to which it was referred for action, but after vigorous protests from pharmacists of the State it was amended by the committee, limiting the number of hours any prescription clerk might work to *seventy hours* in any one week, instead of *sixty hours* as first introduced.

The measure as thus amended promptly passed the Senate, but was defeated in the House of Representatives, due to the effort and hard work of a druggist, Mr. Howard N. Wilcox, a member of the legislature. So that, as the matter stands now, the measure is killed for the present at least.

Now the point I want to make is this, that with the great number of bills coming before the various State legislatures, many of them detrimental to the drug trade, pharmacists ought to take more interest in matters political, electing more of their profession to the State assemblies to look more carefully after their interests, and so block much of the undesirable legislation aimed in their direction.

Bristol, Conn.

BURTON L. BENNETT.

PREPARING A PALATABLE DRAUGHT OF CASTOR OIL.

To the Editors:

I have seen several formulas published in the various pharmaceutical journals for extemporaneously preparing castor oil in a palatable form. I've tried them all, but have found none so satisfactory as the old-style syrup of sarsaparilla, which I make in the regular way, excepting that I use 1½ ounces of concentrated malt extract to a quart of the syrup instead of tincture of soapbark, as is generally employed for producing the foam. The extract of malt is preferable to the tincture of soapbark because it is very palatable and is not an irritant to the stomach. A foam which lasts longer is also obtainable.

I generally put one ounce of this sarsaparilla

syrup in a 10- or 12-ounce glass, turn on the carbonic or Vichy till the glass is full of foam, and lastly pour in the desired quantity of castor oil. You can't taste the oil when thus prepared.

A. B. ROBERTIELLO.

New York.

DOESN'T BELIEVE IN FIVE-CENT SALES.

To the Editors:

Here are a few points which I think should be brought to the attention of the druggists of the United States. Kill off the five-cent trade and make ten-cent sales the lowest. Five-cent sales are as a rule profitless. Drill your clerks to say ten cents' worth instead of five cents' worth. Epsom salt, lead-water, lime-water, and a very few other things are the only ones that it pays to sell five cents' worth of. Five-cent sales of paregoric, tincture of iodine, Turlington's balsam, Bateman's drops, tincture of arnica, listerine, sweet spirit of nitre, spirit of camphor, aromatic spirit of ammonia, essential oils, tincture of valerian, essence of peppermint, Hoffman's anodyne, syrup of ipecac, and many other drugs are made at a direct loss.

In employing a careless or ignorant clerk you do business at a direct loss and then wonder why you do not make money. The laity is ever ready to send to the drug store and say, "Oh, just get me five cents' worth." The old-time proverb that the druggist makes big profits no longer applies. Look at the high prices on all drugs and medicines. The average druggist suffers from self-delusion and wonders why after he pays his bills and expenses he does not have more money. Cut out the five-cent sales! The sooner the druggists of the United States recognize the important fact that they do not pay, the better it will be for them.

JUNIUS PESTLE.

Camden, N. J.

A RATHER UNCANNY PRESCRIPTION WINDOW.

To the Editors:

Let me describe a trim that appeared in our window. It was arranged as follows:

First secure from a doctor friend a skeleton, the larger the better. Then cover the floor of the window with black crêpe paper. Cut up strips of red paper about 3 inches wide and make squares so as to have a red and black

effect. Then print some black cards, using white ink and give the name of some poison, its source, antidote, and dose. Place the card in a square and put poison in front of the card. Then run a small red ribbon from the card to the skeleton's hand.

In the next square use black ribbon, and so on, changing each time. I cut up the crêpe paper in half-inch strips and used them instead of silk ribbon. They work just as well. I also place cards in back of window referring to the prescription counter. I used six cards reading like this:

"We do not substitute."

"Prescriptions for the baby our specialty."

"You can trust us to fill your prescription exactly as the doctor orders."

"Four registered druggists to fill your prescriptions."

"Rogers', the prescription store of Astoria."

"Our prescription prices are as low as best quality will allow."

At night you can place an electric bulb in the skull and enhance the effect. We had a large crowd around our window all the time. The display remained ten days and brought many people into the store. They asked different questions and as a rule bought something.

EMIL A. SCHAEFER.

Astoria, Oregon.

"BEER SEED."

To the Editors:

Referring to an item in your query column of the June number of the BULLETIN OF PHARMACY concerning "Beer Seed," I may say that I have seen these "seed" in several parts of this State. The recipe for the beverage is about what you print, except that molasses is generally considered better for sweetening purposes than sugar. If you would like to have a sample of the seed, I shall take pleasure in sending you some. You may be able to classify them. I have never seen any one who could tell anything about them.

Danville, Va.

W. M. BRYDON.

To the Editors:

In my younger days I used to see people make a beverage of this kind from what was known as "California beer seed." I do not know the origin of this product, but I remember that it was passed around from one neighbor to another.

Recently I clipped from the *Kansas City Times* the following recipe:

Beer Seed.—Take sorghum syrup and sweetened warm water; keep in a warm place for twenty-four hours; pour off two-thirds of the mixture; fill up with sweetened water as before. Keep this up every day for three or four days and the seed is formed.

Whether this is the recipe W. R. M. is looking for, or the same one I was familiar with, I do not know. I am glad to give it for what it may be worth.

W. H. KEETON.

Little Rock, Ark.

TROUBLE IN THE TUMMY.

To the Editors:

Let me contribute something to your museum of natural history—just to show you that others as well as the learned medical pro-

any of
 Sir { I took ^{any of} ~~your~~ ^{specimen} to vomiting
 and that did do no good
 Please be kind enough to give
 boy some medicine to
 remove a candy from the
 pit of my stomach. I
 have swallowed a Smith
 cough drops last night in
 my sleep about 1 o'clock
 in the morning I have
 tried ~~to~~ everything to remove
 it but it is still there
 and it give me intense
 pain into my stomach
 it feel like a stone
 you will oblige me very
 much.

fession may be praised for their penmanship. This letter came to us not long ago from a woman in trouble.

Brooklyn, N. Y. MEYER TUMAN, PH.G.

A READER TAKES ISSUE WITH US.

To the Editors:

I am an interested reader of your "Profits and Earnings" department and after reading your comments on a Michigan druggist's state-

ment in the June issue, took particular notice of your statement in which you say it is practically impossible to make a net profit of \$924 over and above a salary of \$1000 on a \$3000 stock.

Taking as a basis your statement in comments on "A Texas Business" in which you say it is possible to turn your capital over three times a year, I started to do a little figuring, with the following results:

$$\$3000 \times 3 = \$9000 \text{ yearly sales.}$$

Taking 40 per cent on the gross profits, which you said was a fair average in some of your previous comments, and 29 per cent as the expense, I get the following result:

$$\$9000 \text{ yearly sales.}$$

$$40 \text{ per cent} = \$3600 \text{ gross profit.}$$

$$29 \text{ per cent} = \$2610 \text{ expenses, including \$1000 salary.}$$

$$\$ 990 \text{ net profits.}$$

"WISCONSIN DRUGGIST."

CLEANING SILVERWARE QUICKLY.

To the Editors:

In regard to the inquiry of "J. J. D." in the Service Department of the June BULLETIN OF PHARMACY, concerning the use of metallic plates for cleaning silverware, it may not be amiss to mention the method used by Mrs. Clark. She puts the silver articles into a perfectly clean and bright aluminum dish, pours on enough water to cover them, adds one tablespoonful of Wright's Silver Cream, and boils for fifteen minutes. They are then wiped dry when cool enough to handle. By this method silver can be cleaned as quickly as it can be washed.

Rumford, Maine.

J. E. WESLEY CLARK.

THE DEATH BENEFIT ASSOCIATION IDEA.

To the Editors:

I have recently had a letter from a young woman in the East bearing upon a suggestion made by me some years ago in the columns of the BULLETIN OF PHARMACY. My idea was at that time to have a mutual death benefit association created something after the plan of the German Apothecaries' Society in New York. There I believe about 250 members belong, and each chips in a dollar at the death of a member, thus making a death benefit of \$250. Many a time this amount would be a

godsend to some poor druggist's widow for funeral expenses, and the idea that a man's colleagues would relieve the widow in such an emergency appeals to me. Why not take up the matter in the BULLETIN again?

Chicago, Ill.

WILHELM BODEMANN.

ADVOCATES OF THE GERM THEORY.

To the Editors:

We are sending you a "snapshot" taken in our store. We strongly believe in the "germ" theory as evidenced by the cut of our hair. We have been a subscriber to the BULLETIN



for some time and feel that the price of subscription has been many times repaid each year by the information gained from the journal. Wishing you success, we beg to remain, yours truly,

D. H. CLARK & SON.

Verona, Miss.

SOME VERY INGENIOUS SPELLING.

To the Editors:

I am sending you an order which was received not long ago in the regular course of business by the Pecos Valley Drug Co. of Roswell, N. M. It may be of interest to your

*Quick are Toyalis
fare faint troubles*

readers, and I do not think that you will have any trouble in discovering that what was wanted was digitalis for heart trouble, although the ingenuity shown by the man in spelling was quite remarkable.

C. S. BASS.

DON'T BITE ON THIS!

To the Editors:

A salesman for an advertising concern is soliciting orders for photograph pillow tops to be used as premiums. You pay him \$5 and he gives you about \$1.50 worth of cards and samples. The cards are to have the amount of your customers' purchases punched on the margin. He also agrees to furnish you the photograph pillow tops at 45 cents each, but there are other firms who only charge 30 cents each. In addition this man agrees to do other things which, however, not being in the printed agreement, would not bind the principal if written in by the agent.

Christiansburg, Ohio.

JAMES H. MILLER.

To the Editors:

I consider the BULLETIN OF PHARMACY the leading pharmaceutical journal. It is a real achievement in strictly ethical pharmaceutical journalism, due to the editorial staff and chiefly Mr. Mason. The BULLETIN should be on the desk of every wide-awake druggist, as it contains valuable chapters on pharmacy, gives a résumé of things going on in the drug world, and has many commercial and business-getting ideas.

Chicago, Ill.

V. B. R. SIMANOVSKY.

* * *

I want to say that really the BULLETIN OF PHARMACY seems to me the most interesting of any of those which are for the retailers, and your editorial pages as interesting as those I read anywhere in drug literature. It is a paper which every druggist who is progressive should take.

E. F. BILLINGS.

Boston, Mass.

* * *

To the Editors:

Having read nearly all the pharmaceutical journals of importance, I find the BULLETIN to be the only Real Article. When I see the postman drop it on the counter I know there is a treat in store for me.

Stapleton, S. I.

EMIL LINDEMANN.

* * *

To the Editors:

I do not want to miss the King of pharmaceutical periodicals—the BULLETIN OF PHARMACY!

N. L. A. CODY.

Merced, Cal.

THE SODA FOUNTAIN.

SOME SODA HINTS.

BY JONAH F. RUPERT.

Thin glasses are much more pleasing to the soda palate than thick ones and curved glasses look better than straight ones. In glasses, the idea seems to be to please the fancies of the customer and at the same time to guard the money till. Consequently, the bell-shaped glasses have come into more general use. The bell top, when filled with foam, looks well to the customer, who thinks he is getting a big glass for his money, but the rather constricted bottoms supply a limited amount of product.

THE "HEAD."

Soda is not soda at all without the foam top, the "head." The head is that which pulls the nickels by its tempting appearance and is a test of the skill of the soda clerk. But people want more than foam. They appreciate a drink. When the palate is dry, a person wants something to wet it, especially if he pays for it. Therefore, I believe we should give a customer a reasonable amount of soda and only add the foam for appearance. If the glasses are thought to be too large, rather than fill them with foam, reduce the glass in size and give a liberal amount of soda, not forgetting the tempting "head."

As to holders, I recommend something thoroughly practical. Next to this specification, I would recommend a light holder. A practical holder, while of course serving the purpose intended, will wear well, and when the stack of holders comes down with a crash, as happens sometimes, they will be restored from the wreckage with the least damage done.

The necessity for calling a clerk's attention to cleanliness should be considered a warning of immediate discharge upon a second offense. Cleanliness about a public soda fountain is the foundation of the business, and any violation of rules of neatness is serious.

TABLES VS. COUNTER.

Some people like to rush in, get their drinks, and dash off again. These will prefer to stand or sit at the counter. Some of the genteel insist on sitting at the tables, and those who have enough time usually prefer the tables. I believe tables will usually increase business, as the "have another" will usually be more in evidence on a hot afternoon or evening when people of leisure habits gather around the tables in companies often up to six or more. For this reason and others, I would not recommend permanently fastening chairs and tables to the floor, although for a very busy fountain this arrangement saves time arranging the furniture during the busiest hours.

SUITING CUSTOMERS.

We must exercise the greatest care to give people exactly the drink they ordered, and if they want it prepared according to some particular whim or fancy we must attempt to please them, or at least give the

appearance of doing so. Under no circumstance try to force upon a customer a drink that was not ordered.

Should a drink not taste to the liking of the customer, or if he should remark that he wants it a little sweeter, or it is too sweet, we must politely at once insist on suiting his taste by adding more syrup or more water.

All inquiries must be patiently answered. An experienced soda clerk will glide about during a rush or among any circumstances and will keep everybody patient, entertained, and seated. It is an evidence of want of tact on the part of the clerk when a dainty or bashful customer wants to try everything at once, not knowing at all what to drink.

Of course, the patience of the soda clerk will be most painfully tried at times, but it must be remembered that patience is as much a part of his art as concocting the tempting nickel snatchers.

REGARDING FANCY DRINKS.

I never felt that the soda business is built and held on the specialties of the fountain. Rather, I believe the treatment of the customer, the quality of the drinks dispensed, popular prices, the general appearance and impression, will attract more nickels and dimes than any fancy name or drink ever did. Of course, a limited number of fancy drinks of merit may be added, just for variety. Usually, in such cases, the name seems to have more value in general connection than the drink, especially when the name is made to apply distinctly to the beverage. For instance, "Wintergreen Breezes" is applied to a soda of wintergreen flavor, even though very faint, made in a large glass with an immense head of foam that will stand. The drink must be imbibed through a straw, for no mouth is large enough to save the face from an application of foam in the case considered. This drink may be colored green with aqueous chlorophyll if desired.

Menu cards should be printed; but I believe the tendency to arrange them in book form, strung out to make an appearance, with little matters thrown in to make space, is a bad idea. I prefer to print all on one side of the card, thus saving both the time of the clerk and the customer and making the card much more easily comprehensible.

The drinks most usually called for should be arranged at the top of the card with prices in all instances. The fancy-name drinks can be put at the bottom of the card, so that they can be had by those who like to "try something new."

If a customer has fault to find with any drink, insist on taking the drink from him and supplying another. Every such complaint should be most carefully examined into. Usually the complaint will be found to be reasonable.

AS TO STRAWS.

The plan of placing a greater or less number of straws upon the table in a container is often complained against by the most careful. From a sanitary point of view it is most inexcusable. I think a better plan is to supply a straw with each drink, in the glass or without, usually in the glass. If the customer does not care for the straw he will not use it, or often this class of persons are those who "dash in and dash out

again," and they are not slow about saying "Please leave the stick out."

Incidentally, I will remark that the idea of putting a "stick" into the drink, as practiced at some fountains, and considered a clever ruse, is a reprehensible practice. The revenue officer has a habit of patronizing these places.

THE ICE CREAM.

Ice cream, of course, will also be required to come up to the first class in standard, as other articles entering into the business. With ice cream, the standard is not particularly one of fat content, but of freshness, the absence of the cheapening agents usually added, and rank flavors. Ice cream should not be too highly flavored and must be of the proper consistence when dispensed. Soft ice cream will ruin any fountain business. But the cream must not be too hard. Ice cream that can be chewed requires too much time to dig it from the tins, and is not desired by many customers.

As to the storing of ice cream, the entire virtue of the cold lies in the brine or melted water about the cans. Cream keeps at a proper consistence when the tins are immersed well into the brine with very little ice floating about in the water. I know, particularly, of an inexperienced man who dispensed his ice cream from the packers as supplied by the manufacturers and had arranged to allow the water to escape from the packers at once by removing the plug at the bottom. He stated that in spite of packing and repacking with a large amount of salt and ice, he could not keep his ice cream hard, and I know that he never learned the secret and finally gave up handling ice cream in disgust. It is a mistake to remove the melted water too rapidly or often. Rather an arrangement should be made by which the cans can be held down into the water and the liquid removed only when it rises so high as to cause fear of its flowing over the edge into the ice cream. Should this happen, the best way to undo the mischief is to remove the tin at once, pour off the salt water, add several affusions of pure water, and usually the cream will be found not the worse for the entire experience, except that it may be a bit soft on the top. The danger of the cans leaking must be closely guarded against.

PLAIN CREAM.

As to the use of plain sweet cream in plain soda, some dispensers are too free in using cream where it is contraindicated. Cream should not be added to acid drinks, such as strawberry, lemon, raspberry, etc., or drinks containing fruit acids, as the cream is curdled, and if not drunk at once the curd collects on the surface and the customer will think something is "wrong." Cream may be added to vanilla or chocolate with improvement.

PROFIT LEAKS AT THE SODA FOUNTAIN.

To so perfect construction that the awful "profit leaks" in the operation of a soda fountain might be avoided, has been the dream of the progressive manufacturer for the past ten years.

To place the soda fountain business upon a certain and definite basis of profit that could be measured as

accurately as would be possible in calculating the profits from the sale of a dozen bottles of castoria, or other patent medicines, has been the goal to which great manufacturers hoped to attain.

The fountain inventor and designer recognized that there were four elements of loss in the operation of the average machine that in the aggregate of a season's run were a tremendous charge on the net profits of operation, viz.:

1. Loss of volume in ice cream.
2. Loss through the daily ice bill.
3. Loss through overmeasure of syrup.
4. Loss through fermenting syrups and crushed fruits.

To explain these losses for fuller understanding:

Loss of Volume in Ice Cream.—2½ gallons of material when frozen in a brine freezer will make five gallons of ice cream. And so long as this ice cream is preserved in a perfect condition, it will dish out perfectly according to the measuring dipper used by the dispenser—12 to the quart; 16 to the quart; or, other measure employed. But the moment this ice cream becomes soft or mushy it loses from 42 to 50 per cent of its volume. The melting cream may be only around the walls of the can, but any operator may quickly discover that this apparently small meltage is sufficient to cut the number of measures to the quart in half, or nearly so. This item is the largest element of loss in any fountain. To prevent it means the cutting of the ice-cream bill anywhere from 20 to 33⅓ per cent. To build a fountain that would accomplish this result was the great ambition of certain manufacturers.

Loss Through the Daily Ice Bill.—The leaks in profits on this item would naturally be different in different fountains and with different operators. But be the daily loss small or much, in the year's run the constant drip-drip-drip of the ice-box had worn a great hole in the fountain profits, as the melted ice water found its way into the city sewer. To save this was a great achievement.

Loss Through Overmeasure of Syrup.—The natural tendency of all dispensers with a spigot syrup faucet or bottle, or an imperfect pump, is to put more syrup in the glass than really should be served. The season's aggregate losses from this feature of operation are always considerable. The progressive manufacturer thought to save this loss for the fountain owner.

Loss Through Fermenting Syrups and Crushed Fruits.—Every operator knows that the average fountain will not keep his syrups or crushed fruits cold enough to preserve them. To build a fountain that would insure sufficiently low temperature to guarantee thoroughly chilled syrups and fruits has proven no small difficulty.—E. R. THOMAS, in *The Show Globe*.

A COUPLE OF FORMULAS.

SPANISH LEMONADE.

The juice of ½ orange, the juice of ½ lemon, and 1½ tablespoonfuls of sugar, 1 scoop of crushed ice, and water to fill a large glass.

GRAPE-JUICE-ADE.

One ounce lemon syrup, 1 ounce grape juice in mineral glass; fill up with soda, stir well, and serve.

PRACTICAL PHARMACY

Dispensing Difficult Prescriptions.—

At a recent meeting of the Edinburgh Chemists' Assistants' and Apprentices' Association a symposium was held on dispensing problems and related matters. J. D. Watson communicated the following notes on pills and emulsions:

FERROUS CHLORIDE IN PILLS.

Ferri protochlor.....gr. ij.
Aloin.....gr. 1/12.

Ft. pilula. Mitte tales xij.

Batch No. 1 was massed with 1 grain of powdered tragacanth and 1 minim of simple syrup; for the second dozen pills 2 drops of mucilage of acacia was used to make the mass; while lot No. 3 was massed with anhydrous wool-fat, with the addition of 3 grains of powdered marshmallow. The three batches were rolled in licorice powder, lycopodium, and French chalk, respectively, and then placed in separate bottles and well corked. The first lot showed signs of softening after five days, but no change could be detected in the other two. A pill from each lot was then laid aside in a pill-box, and about five hours later No. 1 was like a drop of muddy water, while No. 2 was beginning to show a little dampness on the surface, but No. 3 was still unchanged. Two days later No. 2 had also collapsed, but No. 3 still retained its shape, though quite soft.

It was remarked that ferrous chloride, being very deliquescent, should, if kept in stock for some time, be carefully dried on a water-bath before using for pills.

If only a dozen pills are ordered at one time, either syrup with tragacanth or mucilage of acacia does perfectly well; in fact, mucilage makes the hardest pill. If a large quantity be ordered, anhydrous wool-fat with a little marshmallow is much to be preferred, although it does not make such a hard pill.

In the discussion one of the members said he had found wool-fat with 10 per cent of wax gave a good pill, and that the addition of marshmallow was liable to cause oxidation. He also showed a sample of ferrous chloride pills made with a benzol solution of Canada balsam as excipient which remained quite hard at the end of twenty-four hours when kept in an ordinary pill-box, but which dissolved in water at blood temperature, with occasional shaking, in half an hour.

The chairman said ferrous chloride pills massed with anhydrous wool-fat and varnished were perfectly good at the end of a year. He thought such pills should always be varnished.

A BALSAM OF PERU EMULSION.

Bals. Peruv.....3ij.
Syr. tolu.....3ss.
Tr. camph. co.....3iss.
Aquam ad.....3iv.

Sig.: A teaspoonful if the cough is troublesome.

No. 1.—Made by rubbing the balsam with an equal part of powdered gum acacia, adding 3 drachms of water to form a mucilage, then more water, and the syrup and tincture last of all.

No. 2.—Prepared by rubbing the balsam down with

an equal part of almond oil, and then adding 6 drachms of water, finally finishing off as above.

No. 3.—To a fresh mucilage of powdered gum acacia 2 drachms and water 3 drachms the balsam is added gradually, then more water, and lastly the syrup and tincture.

No. 2 gives a nice white emulsion, but the addition of a fixed oil seems quite unnecessary, as No. 3 is entirely satisfactory.

Other formulas discussed were:

Ferri arsenat.....gr. 1/12.
Potass. carb.....gr. ijss.
Ferri sulph.....gr. ijss.

Ft. pulv. Mitte tales xxiv.

Forty grains of dried ferrous sulphate was used as the equivalent of the 60 grains of ferrous sulphate crystals, the 20 grains of water of crystallization being used to dissolve the potassium carbonate, the two salts being rubbed together thoroughly. The ferrous arsenate is added and the whole set aside for ten minutes, when the mass becomes quite hard, but softens on working. Powdered tragacanth 4 grains is added and the mass rolled out. A great saving of time and labor is effected compared with rubbing up the crystal sulphate of iron and potassium carbonate.

Argenti nitratis.....3ij.
Aluminis.....3iv.
Aq. destill. ad.....3viij.

Solve.

Sig.: Add a tablespoonful to half a tumblerful of water and use as a gargle three or four times a day.

Silver sulphate is precipitated by interaction between the silver nitrate and alum. This precipitate dissolves when diluted with the amount of water directed, but it is such a heavy powder that it will be very difficult for the patient to get an equal quantity of the precipitate in each amount used. It is better to dissolve the salts in twice the quantity of water and direct two tablespoonfuls to be added to the required quantity of water.

Sodii bicarb.....3ij.
Bismuth salicylat.....3ij.
Sp. chloroformi.....3iss.
Infus. gentian. ad.....3viij.

Calculation shows that 1 drachm of sodium bicarbonate is sufficient to convert the 3 drachms of bismuth salicylate into oxycarbonate, and these amounts were heated together with the water to dispel the carbon dioxide, and then allowed to cool before adding the other ingredients. It is not permissible here to dispense bismuth carbonate, because if dispensed with the salicylate the sweet taste of sodium salicylate is quite predominant, and the patient would at once notice the difference.

An elderly gentleman was strolling in the East End when a woman rushed up to him.

"Oh, sir, will you please come at once? There's three brutes of men jumping on a poor organ-grinder."

"Is he a big organ-grinder?" queried the old gentleman, calmly.

"No, no, sir; quite a little man. Oh, come at once, or it will be too late!"

"I don't see why I should interfere," replied the old gentleman. "If he's a small man, the three of them don't need any help."—*Tit-Bits*.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Some Neat Package Slips.—

H. W. Lahr of the Crescent Drug Store, Glasco, Kansas, employs a variety of counter slips in his business. They are mailed to customers along with circular letters and are also wrapped up in packages. Here is one of a distinctly literary character:

IN the spring when mother earth changes her celestial cloak of snowy white, studded with diamonds of crystal ice to a cloak of emerald green, brightened by sparkling drops that patter in the night, and her breath becomes redolent with the odor of sweet perfume and is mingled with the notes of the sweet voiced birds; and when every heart is the heart of truth and every deed the deed of love; then Palmer goes from hill to meadow, from mountain to valley, from ocean to ocean and sea to sea, and with his scientific hands receives from the beautiful cups of daffodil, the sweet pea, the lovely rose, the beautiful lily, from the fragrant clover and the spicy carnation their choicest odors, and with the skill of only him he places them in beautiful packages and distributes them to the world.

Yours truly,

NATURE, The Producer.
PALMER, The Distributor.

P. S. For sale at the Crescent Drug Store, Glasco, Kansas.

Another slip appeals to book lovers:

BOOKS

WE make a little study of books and authors. We buy the best done in the latest art of book bindery, so we have books that not only make beautiful gifts but make friends also.

One for any occasion.

Then if you wanted a book printed in clear type on best paper and bound in boards, it would be a joy to look over our collection.

Ask about the circulating library for 1911.

The Crescent Drug Store

GLASCO, KANSAS

OVER

Then there are one or two on vanilla and spices:

PURE VANILLA—that is all

NOTHING wonderful or supernatural about the way we make it. Simply get the pure Vanilla beans, cut them into small pieces, then add Rock Candy and Alcohol, and just let the vanilla set three months in a cedar keg. Then pour off the clear liquid and bottle. This gives the purest, strongest Vanilla that is possible. **Crescent Drug Store** to make. Never was a drop made **AND** stronger, nor purer. For sale at **Burnett Mercantile Co.**

It is evident that Mr. Lahr has given this form of advertising his earnest attention.

Advertising Among the Farmers.—

The proprietor of Crafts Drug Store, Chagrin Falls, Ohio, is a persistent advertiser. At the county fair held

in that town last fall a booth was fitted up, and among other things a number of cards were handed out exploiting different products. We are reproducing one of these cards, and it will be found rather unique in nature. It contains no advertising beyond the intimation

To Prevent Diseases of Poultry

CURE FOR CHOLERA, ETC.

It keeps hens strong and healthy. Cheapest recipe on the market today, and one of the best. It's beyond comparison for keeping your chickens in fine condition.

Copperas 12 oz.

Blue Vitriol Half oz.

Cayenne Pepper 4 oz.

Venetian Red 8 oz.

Saltpetre 8 oz.

Mix

FOR LAYING HENS—1 tablespoonful to a gallon of soft feed. Feed in the morning.

FOR SICK HENS OR CHOLERA—Two tablespoonfuls in two gallons water.

Crafts Drug Store

CHAGRIN FALLS, OHIO

that the familiar substances mentioned on the card may be purchased at the Crafts Drug Store. A formula is given which the farmer will be glad to have, and he is quite likely to keep the card for this reason. When he wants the formula put up what is more natural than that he should go to this particular drug store for it?

Corralling the Baby Business.—

Ira E. Dunlap, 4 North Saginaw Street, Pontiac, is a man of original ideas. He gave a talk on salesmanship at the last meeting of the Michigan State Pharmaceutical Association, which attracted a great deal of attention. Afterwards we found that he was using a unique method for developing his business in baby supplies. Whenever he hears of the birth of an infant, he sends the following typewritten letter to the mother:

DEAR MADAM:

We desire to congratulate you on the arrival of a new baby at your home. They are always such dear little bodies, bringing so much sunshine into the house. They are considerable care, but what mother would part with one of them no matter how many hours of toil it occasioned?

Sometimes sickness comes to them, which we hope will not be the case with yours, but should you be so unfortunate you want the best medicine obtainable to restore it to health again, and we desire to remind you that our store is the newest and cleanest in the city. We take special pride in having our medicines strictly fresh and of the very purest, so that you can always rely on what you get here.

If you should have to feed the little one on prepared food, we have a complete line of all the popular foods, fresh every week, and we have a large stock of nipples, bottles, etc. When in health baby needs pure soap, talcum powder, nice soft sponges, and many other little accessories that we always have.

We are enclosing a card for you to complete with baby's name, and if you will bring baby and card to our store within three months we shall give baby a nice present, one you will be proud for it to have. It is not necessary for you to buy one

cent's worth to get the present. We like babies, so won't you please bring yours in so we can see it?

Wishing you a speedy recovery, and baby the best of health, we beg to remain,
THE PEOPLE'S DRUG STORE,
I. E. DUNLAP, Prop.

The card which Mr. Dunlap encloses with the foregoing letter is as follows:

O

Name _____

Born _____


Street _____

Mother

Mr. Dunlap has found that this method brings excellent results. Mothers are always pleased when the arrival of their babies is noticed even by a business man, and many times proud mammas have told Mr. Dunlap that he was the only person who had congratulated them and wished them good luck.

Some Specimen Advertisements for Duplicating.—

Not long since we received from the C. E. Zimmerman Co., Chicago, Ill., an interesting collection of sample ads. such as they supply to druggists who subscribe to their syndicated advertising service. They were all good, but we are taking the liberty of selecting four of them for reproduction at the bottom of this page. They are certainly worth using by the readers of this department of the BULLETIN who are looking for ideas. The drawings in the ads. can be easily reproduced into zinc etchings by any cut maker at a very slight expense—probably 60 cents apiece.



YOUR DOCTOR KNOWS

and will tell you that unless his prescriptions are filled with the utmost fidelity—with the purest and freshest drugs—all his ability to cure you will be wasted. Your prescriptions should be brought to this store where we pride ourselves on the care devoted to carrying out your physician's instructions. Ask your doctor—he knows.

While our prescription department is the best equipped in this store, we also have a well stocked stock of all the latest necessities in medical and sanitary supplies.

These are Some of Our Specials:

Name and address of store here in bold face type

What Makes a Good Cigar?

Answer:—Enjoyment

TO give you satisfaction a cigar must be of the brand that pleases your taste—it must also be well kept—just sufficiently moist to burn evenly and fragrantly to the end—and the wrapper must hold neatly and smoke clean. Our cigars are like that and we carry all the best brands.

These are a few cigars we have in stock:

Name and address of store here in bold face type

A Stationery Ad.—

The Skidmore Drug Company of Skidmore, Mo., has used a circular devoted to stationery with good results. We are reproducing it herewith. It was a

“Our Destinies Lie in Our Education”

TRUE EDUCATION:

“The object of true education is not merely to make people do right things, but to enjoy the right things; not merely to be pure, but to love purity; not merely just, but to hunger and thirst after justice.”—RUSKIN.

We are prepared to sell stationery to the truly educated; those who are being educated, and those willing to be educated.

What Kind of Writing Paper do You Use?

Appropriate writing materials have as much to do with the success of your correspondence as appropriate clothing has to do with your person. It is just as important that a letter should be correctly dressed as it is that you should be when you meet the people to whom your correspondence is addressed. YOUR CORRESPONDENCE IS YOUR REPRESENTATION. Users of Good Writing Paper can be suited here, in the latest style box paper, or tablets with envelopes to match. We have paper from Eaton & Hurlbut, Whiting, Crane, and other good paper makers. Prices Always Right and according to quality.

WE SELL EVERYTHING FOR WRITING.
WE SELL EVERYTHING FOR SCHOOL.
POST-CARDS, STATIONERY AND SUNDRIES.
SCHOOL BOOKS AND SCHOOL SUPPLIES.

THE STORE OF QUALITY

Skidmore Drug Company

practice in the store to enclose the ad. in school-books, tablets, and stationery that were sold. The folder created quite a little comment among customers of the store.



BRING YOUR GIRL

to the splendid soda fountain at this drug store. She will find here courteous attention and the most delightful drinks in town. We cater especially to the ladies—our sodas, sodas and frappes were long ago voted just too delicious for anything by the prettiest women in town. Ask her—bring her in today—she wants to come anyway.

A cool half hour spent at this soda fountain is a very pleasant way of whiling away that time.

Name and address of store here in bold face type



WHEN YOU GET A LETTER

you often judge the sender by the stationery. Poor stationery makes a “cheap” impression. Other people judge you in the same way when you send a letter. See that your stationery is good. The difference in price between good and bad stationery is so small that you can afford to get the better kind.

Come in and look over our high class stock today. Our stationery department is the best equipped in this county. These are a few of our specials.

Name and address of store here in bold face type

Four good ads. worth borrowing and using.

BOOKS

"THE PREVENTION OF SEXUAL DISEASES."

Victor C. Vecki, M.D., writes in this small volume with great frankness of the venereal peril and the vital necessity of grappling with it in a direct and effective manner. Without mincing words he shows the vast amount of suffering of a thousand kinds caused by syphilis and gonorrhea, the great difficulty of curing either of these diseases, the millions of victims infected by them, and the remote and startlingly unexpected manifestations and sequelæ in nearly every organ of the body. He believes that the public cannot know too much about the real conditions, and that the foolish prudery which has always surrounded the subject must be abandoned in the interests of human life and health. He also believes, however, that even a full knowledge of the penalties will not suffice to quell men's passions, and he argues strongly for public segregation and the most rigid of supervision. Since prostitution cannot be wiped out—since the efforts of thousands of years directed toward its abolition have failed—he declares that the only sane thing to do is to cease all pretense of destruction and resort to intelligent regulation instead.

Incidentally we can scarcely refrain from injecting into this impartial epitome of Dr. Vecki's opinions our own oft-expressed opinion that in view of the terribly serious and prolonged character of these venereal diseases, no druggist should for an instant think of treating them or should have for sale either a remedy of his own or a proprietary mixture. This is trifling with human life in a criminal manner. In these days, when we know, or ought to know, what venereal disease means, we should send every case of syphilis or gonorrhea at once to a specialist—and the best one available at that.

"The Prevention of Sexual Diseases" is published by the Critic and Guide Company, 12 Mt. Morris Park, West, New York City. The price of the book is \$1.50, postage prepaid.

MERCK'S MANUAL.

Our readers will be glad to know that the new, fourth, edition of Merck's Manual is now ready for distribution. This little pocket book, while intended particularly for the medical profession, has much to interest the pharmacist. The first section is devoted to materia medica and embraces all those drugs and chemicals which are commonly used by medical practitioners. It tells the properties, doses and uses of different substances. The second part is given up to therapeutics. It summarizes the principal means of treatment for each form of disease and comprises many formulas in actual use by physicians. In part 3 the various drugs are classified according to their physiological action. The rest of the Manual is of a miscellaneous character containing useful hints and re-

mindings of every-day applicability. Among other things it comprises a comprehensive essay on poisoning and its treatment, a chapter on urinalysis, and an unusually exhaustive dose table of all the agents official in the United States, Germany and Great Britain, the preparations of the National Formulary and other remedies.

Merck's Manual is published by Merck & Co. and will be sent on receipt of forwarding charges of 10 cents in stamps to pharmacists or to students enrolled in any college of pharmacy in the United States.

A NEW BOOK BY FRANK FARRINGTON.

"Store Management Complete" is the latest book by Frank Farrington. We understand that Mr. Farrington has developed his avocation of writing for the trade papers to such an extent that he has sold his retail drug store in Delhi, N. Y., and has decided to limit himself in the future to journalistic and book work. The present volume is a reprint of a series of articles which have been appearing in a number of trade papers in different lines. The book aims to cover the whole subject of merchandizing in a brief manner, and the different chapters are devoted to the store arrangement, the buying of goods, the store policy, the management of clerks, leaks, expenses, the credit business, the giving of premiums, etc., etc. The book contains 222 pages, is bound in cloth, costs \$1.00, and is issued by the Byxbee Publishing Co., 440 South Dearborn Street, Chicago.

HISTORY OF THE VEGETABLE DRUGS OF THE U. S. P.

Bulletin No. 18, Pharmacy Series, No. 4, of the Lloyd Library in Cincinnati, is devoted to a "history of the vegetable drugs of the Pharmacopœia of the United States." Some of the historical articles in the brochure have already been appearing in the different pharmaceutical journals during the last month or two, and one of them, devoted to *Strophanthus*, was published in the BULLETIN OF PHARMACY for June. The gathering together in compact form of this historical data will make the book of great value in the years to come, and a feature of great usefulness, too, is the extended bibliography at the end of the volume.

SECRETARIAL CELERITY.

For several years Dr. H. M. Whelpley, in his capacity as secretary of the Missouri Pharmaceutical Association, has earned a reputation for promptness in getting out the proceedings of the association. This year, however, he has beaten his own record. The Mo. Ph. A. adjourned on June 16. Exactly thirteen days later, on June 29, bound copies of the proceedings were mailed to members and to the pharmaceutical press. This degree of promptness is quite equal to that shown by the monthly pharmaceutical journals—but then, you know, Dr. Whelpley is a pharmaceutical editor, which is sufficient by way of explanation.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

The Leaven of Investigation.—

German chemists say that glycerin in wines is not a true fermentation product, but is a product of yeast metabolism.

A concentrated lemon juice that will keep is prepared by evaporating the fresh juice in a stream of carbon dioxide and under reduced pressure.

Ferris oleate, prepared from Castile soap and ferric chloride, will dissolve in cod-liver oil and give a palatable and stable ferrated cod-liver oil.

E. Jordis defines colloids as "pure solid substances which as a result of their surface condition show peculiar chemical effects."

VonBolton thinks that diamonds were formed in nature by the action of metal vapors, such as iron or magnesium, on carbon dioxide. He has made microscopic diamonds by the action of mercury vapor on carbon.

Stilson says that rust can be easily removed from iron articles if they are first soaked in a strong solution of sodium hydroxide.

An Italian chemist says that commercial ether contains traces of an oxidizing body which can be completely removed by agitating with freshly-precipitated (or nascent) ferrous hydroxide.

Cleanliness Next to Tastiness.—

D. Gilmour says that for flavoring dentifrices, cassia oil is the most strongly antiseptic of any, but that it is irritating to the gums and liable to cause inflammation, and is also liable to discolor the teeth. Ceylon cinnamon oil is better in the latter respects. Clove oil comes next in antiseptic value, and is also anesthetic and non-irritating. Bay oil is similar to clove and is worthy of consideration in dental flavorings. Next in antiseptic value comes peppermint oil, then eucalyptus oil, which is a better antiseptic than eucalyptol. Oil of thyme comes next, but is slightly irritant. Wintergreen oil is much used, and is good as far as it goes, but is inferior to the others as an antiseptic.

The Right Weigh.—

O. Kuhn says that in a series of ten weighings of a porcelain dish within a month, a variation of 0.58 milligramme in weight was found, but when the weighings were corrected to vacuum the greatest difference was reduced to 0.06 milligramme. And J. J. Manley says that all balances undergo a shift in the resting point with changes in temperature, even if the balance be uniformly heated, and that uniformity in weighing can only be secured when the balance is kept uniform in temperature, and an interval of ten minutes between loading and weighing is allowed.

Another Round in the Sul-fite.—

E. Post has endeavored to learn whether sodium sulphite has any more injurious action on the system than common salts in general. He finds that when

given in concentrated form, it increases thirst, as does common salt, but if water be given freely the salt does not appear to have any injurious effect. It was given to dogs in doses of more than 2 ounces per day, and no evidences of poisoning or injury were found, even in these doses.

Just Naturally Cussed.—

H. Sassen says that he cannot find any difference in the action of natural and artificial camphor, in tests upon animals. The fatal dose for cats is the same for each, and their influence upon temperature is the same. He thinks that artificial camphor has the same medicinal value as the natural.

About Quinine.—

A. Graziani says that repeated, small doses of quinine, continued for a long time, tend to weaken the system and make it more susceptible to disease. Experiments on animals showed that they are more susceptible to cholera, typhoid, pneumonia, and anthrax. The blood does not appear to be altered, nor the phagocytes decreased, but the blood serum of men showed a decreased resistance to typhus after long dosing with quinine.

A Great Big Germicide!—

Dr. Koch says that the hippopotamus is the best preventive of sleeping sickness. This disease is caused by the bite of a fly which deposits the germ in the blood of its victim, and so causes the disease. The fly cannot live without feeding on crocodile blood, and the hippopotamus destroys the crocodile and its eggs. Hence the hippopotamus destroys the sleeping-sickness germ. See? Hip! Hip!

To Fold a Filter.—

P. E. Raaschou (excuse me!) says that with a normal funnel of 60 degrees the filter paper should be folded at an angle slightly greater than 90 degrees and the corner of the inner fold cut off to prevent an air channel forming. The upper portion of the paper should fit the funnel closely, and the tip should hang over the center of the stem.

What's Not So.—

Professor Power says that leptandra does not contain any glucoside, but does contain an intensely bitter amorphous product. "Leptandrin" contains this body. He also says that blue-flag loses all of its physiological properties by drying, and the dry drug is medicinally inert.

A Lemon for Health—or a Knock?—

G. Zickgraf says that limonine is much superior to oil of turpentine as an antiseptic and deodorizer, and in the treatment of lung diseases. It is more agreeable to take, is non-irritating to the kidneys, and is quite effective in reducing secretions.

Digest This!—

It is claimed that 10 per cent of glucose or 15 per cent of maltose entirely prevents the action of diastase on starch, but cane sugar has no effect. Milk sugar decreases it about one-third. Hence milk sugar is not a suitable diluent for diastase.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

A Horse of Another Color.

N. A. S. wants the formula of a black and a blonde hair-dye for horses. He adds: "I have had great difficulty with the ordinary hair-dyes. The black dyes turn the horse's hair to a red color."

The most we can do is to suggest a dye that has been used on human hair. It should be tried in a restricted and experimental way first. The literature at our command makes no mention of a hair-dye intended especially for horses.

No. 1 Bottle.

Pyrogallie acid..... $\frac{1}{2}$ drachm.
Sodium metasilphite.....10 grains.
Water to make.....2 ounces.

No. 2 Bottle.

Silver nitrate.....1 scruple.
Strong ammonia water, a sufficient quantity.
Water to make.....2 ounces.

Dissolve the nitrate in $\frac{1}{2}$ ounce of water, add ammonia until the precipitate is redissolved, and make up to 2 ounces with water.

Two-bottle hair-dyes are put up in cases to hold a one-ounce bottle (No. 1) and a two-ounce bottle (No. 2), or proportionately larger bottles with two short-handled tooth-brushes of black and white bristle. The directions for use are as follows:

Cleanse the hair from all grease by washing it with warm water having a little washing-soda dissolved in it, and dry with a towel. Next pour a little of the fluid No. 1 into a saucer and apply with the white-haired brush; immediately afterwards use No. 2 in the same way with the black brush, avoiding as much as possible touching the skin. Wipe the parts round the hair receiving the dye with a damp sponge, and do not wash or grease the hair for several hours after its application. It is preferable to apply the dye at night.

The more silver there is in the preparation, the darker the dye is.

For blonde hair silver should not be used, but the following in the same manner:

No. 1 Bottle.

Potassium permanganate..... $\frac{1}{2}$ drachm.
Water1 ounce.

No. 2 Bottle.

Sodium hyposulphite.....1 scruple.
Water1 ounce.

Elixir of Creosote Carbonate.

For Several Querists.—Having recently received a number of requests for a formula of a compound elixir of creosote carbonate we submit the following. It is

suggested to us by our pharmaceutical advisers after a considerable investigation:

Beechwood creosote.....	15 minims.
Creosote carbonate.....	2 minims.
Terpin hydrate.....	30 grains.
Heroin hydrochloride.....	$5\frac{1}{2}$ grains.
Tartar emetic.....	5 grains.
Ammonium chloride.....	60 grains.
Sodium glycerophosphate.....	120 grains.
Granulated sugar.....	2 ounces.
Compound spirit of orange.....	5 minims.
Phosphoric acid (85%).....	60 minims.
Sugar, color yellow.....	$\frac{3}{4}$ grain or q. s.
Alcohol.....	2 ounces, 120 minims.
Glycerin.....	4 ounces.
Tokay wine.....	8 ounces.
Talc.....	sufficient.
Water, enough to make.....	1 pint.
Calcium glycerophosphate.....	60 grains.

Dissolve the creosote, creosote carbonate, spirit of orange, terpin hydrate, and heroin hydrochloride in the alcohol and add the glycerin. Dissolve the remaining substances in the wine and add this to the alcohol. Add water sufficient to make 1 pint. Age one week and restore any alcohol lost by evaporation; add talc, and filter through paper.

Looking over this formula several facts stand out. In the first place, about the only effective agent present is the heroin hydrochloride, though this is aided to some extent by the tartar emetic. Beechwood creosote is present only to the extent of 15 minims, and the creosote carbonate only 2 minims to the pint, but even these small quantities give a pronounced taste and flavor. A pleasant-tasting remedy of this kind containing not more than 25 per cent alcohol cannot be made if sufficient beechwood creosote or creosote carbonate is included to be therapeutically valuable.

Terpin hydrate is present in too small a quantity to be of any value. The same thing is true of ammonium chloride and the glycerophosphates.

An Excipient Wanted.

F. X. T. asks us to publish the following prescription and to give the proper excipient and mode of preparation:

Beechwood creosote.....	4.0.
Menthol	2.0.

Mix and make 60 pills. Direct one to be taken after each meal.

Prof. W. L. Scoville offers the following suggestions: Dissolve the menthol in the creosote, add three grammes of spermaceti, heat until the latter is dissolved, then chill. When the mixture has set, add enough wheat flour to make a stiff and somewhat crumbly mass; then mass with just a trace of mucilage of tragacanth.

Beeswax is often used for mixtures of this kind, but it makes a less soluble mass and one which does not dissolve or soften as promptly. Spermaceti has nearly the hardening properties of wax, but gives a mixture which melts at a lower temperature.

Powdered licorice is also used as an absorbent, but is decidedly inferior to wheat flour, both in absorbing and in massing properties. If the flour is adjusted right a good mass can be made without the use of mucilage of tragacanth.

Gelatin is sometimes used for pills of this character. Thus— $5\frac{1}{2}$ parts of gelatin and $2\frac{1}{2}$ parts of sugar are dissolved in 12 parts of water by the aid of heat. This mixture will absorb about one-half its

weight of creosote or a mixture like the above, and will "jelly" when cooled. To such a mass add enough flour or althæa (preferably the latter) to make a mass. But this method will make quite as large a pill as the one first given, and is more troublesome for single operations.

An Incompatible Eye Lotion.

J. W. submits the following query: "How can the following prescription be compounded so as to make a presentable preparation for an eye lotion:"

Hydrastine sulphate.....5 grains.
Boric acid2 grains.
Sodium borate.....4 grains.
Deodorized tincture of opium.....½ drachm.
Distilled water, enough to make.....1 ounce.

M. Sig.: A few drops in each eye three times daily.

Borax is alkaline in reaction and precipitates the hydrastine as free alkaloid, and also precipitates the alkaloids from the tincture of opium. The boric acid present is not sufficient to neutralize the alkalinity of the borax. As the preparation is to be dropped into the eye, it should be filtered, but in so doing nearly all of the hydrastine is removed. The physician's attention should be called to this, and he be advised to increase the amount of acid or decrease the borax, or, what is better, leave out the latter entirely. Boric acid does not give a precipitate with a solution of hydrastine sulphate. Or, the prescription can be filled by adding five to seven drops of glycerin directly to the borax, mixing well, adding part of the water, then the other ingredients. Water precipitates a little resinous matter from the tincture.

A Tooth-wash.

A. G. P. remarks that he had tried many standard formulas for tooth-washes printed in the books and drug journals, but he doesn't find one that gives him "that pleasant and lasting taste" possessed by some of the proprietary articles.

Prof. W. L. Scoville suggests something on the following order:

Thymol30 grains.
Menthol30 grains.
Oil of peppermint.....30 minims.
Oil of birch.....2 drachms.
Oil of cinnamon.....20 minims.
Oil of eucalyptus.....1 drachm.
Alcohol1 pint.

This is a more strongly alcoholic preparation than those customarily employed, and Professor Scoville thinks that A. G. P. has been trying some of the published formulas which are more weakly alcoholic in nature. This is why, perhaps, the taste hasn't been sufficiently strong and lasting.

A Strange Discoloration in Phenacetine.

N. S. writes us as follows: "I would be much favored if enlightened on the cause of the following: One sample of phenacetine gives a slight blue coloration on the addition of rum, which intensifies on standing, whilst another sample behaves in quite a different manner, giving the usual colorless solution.

Some powders of No. 1, my first stock, were returned by a customer with a letter bearing a complaint. Which is correct?"

The best explanation that we can make is that the specimen No. 1 may contain a trace of iron, which would react with the tannin in the rum to give the color. Iron is not a common impurity in phenacetine, but might occur.

Preserving Fruit.

C. J. H. Co. wants a formula for preserving fruit. Add one-tenth of one per cent of sodium benzoate. Dissolve the preservative in water and add the solution to the fruit pulp. This is done just before the fruit is removed from the fire and after it has been boiled with sugar. The hot fruit is then poured into heated sterilized jars and sealed hermetically. Of course, the preliminary operations will vary with the nature of the fruit. Fill the containers full. In heating the jars put them in cold water and raise them to the boiling point.

Film Cement.

W. R. B. asks us to publish the formula of a film cement for non-inflammable picture films.

The following formula was given us by an experienced photographer:

Ether2 ounces.
Acetone4 ounces.

Take a strip of non-inflammable film about 8 inches long, cut it up into small pieces, and dissolve them in the solution.

This, we are told, is a very good cement for the reason that it works quickly.

Tincture of Horseradish.

G. F. S. wants a formula of a hair preparation containing horseradish root. We suggest a tincture of horseradish as a working basis of such a compound:

Horseradish root, freshly grated....5 ounces av.
Alcohol4 ounces av.
Diluted alcohol, a sufficient quantity.

Macerate the drug with the alcohol for several days, agitating twice daily. Then transfer it to a percolator, allow the liquid to drain, and pass enough diluted alcohol through the drug to make the total percolate weigh 10 ounces avoirdupois.

Increasing the Specific Gravity of Simple Elixir.

R. B. C. wants an elixir base that will produce a preparation somewhat heavier than simple elixir and of a slightly greenish color. We suggest that in making his simple elixir he substitute glycerin for some of the water to make it heavier. The elixir can then be colored with chlorophyll or tincture of hemp-seed.

Rat Pastes.

F. J. B.—Several formulas for rat pastes, made with and without phosphorus, were printed on page 480 of the BULLETIN for November, 1910, and we refer you to that rather extensive treatment of the subject.

GENERAL ESSAYS

ESSAYS IN BRIEF.

BY HARRY B. MASON.

One thing at a time—and that the necessary thing!

A cultivated man should "know something about everything," and "everything about something."

Make no resolves of what you will *not* do; resolve what you *will* do. Let your philosophy be positive, not negative.

The chief value of books is to give us a larger capacity to understand the greatest book of all—the Book of Life.

Pride without courtesy is mere egotism; dignity without courtesy is mere arrogance; and yet pride and dignity are very desirable qualities.

The greatest purpose of knowledge is to give us an understanding of life, and the highest function of the past is to teach us the present.

Learning harnessed with action: this is the ideal combination. Each without the other is incomplete; together they mean power, success, efficiency.

The men who are born and reared close to Nature's heart are the men of power; and it is the country boys who become the most successful men in our great cities.

Freshness of view and initiative come only to the rested brain, and to the man who periodically gets away from his business and looks at it objectively from a distance.

Do the important thing first, and let the comparatively unimportant thing wait upon it—this wise rule of action, like every other, should be applied with wisdom and modified in accordance with one's environment.

I take it that success, however we define it, depends upon the harmony with which we adapt ourselves to our environment and make it minister to our pleasure, our profit, and our well-being and well-doing generally.

That legislation is ineffective, and may even be harmful, which does not hold itself backward to keep pace with the evolution of public sentiment, and which does not secure its strength from an enlightened public support.

Pretty much everything depends upon making up one's mind to follow a certain course of action; and most things are left undone, not from lack of time or capacity, but from the absence of a determination to achieve them.

Education in the broad sense is the basis of the social structure. It is the foundation stone in the progress of any race, any nation, any calling, any individual. To build the house upon anything else is to build it upon the sand.

Strength comes largely from opposition. The things which develop character and power are not coddling, wealth of opportunity, nor the education of the schools. Trials, difficulties, obstacles—these are the forces which make for greatness.

Knowledge is made up of the essential and the un-

essential. The essential should be remembered; the unessential should be forgotten. And the mind that performs this sifting process with the greatest perfection is the mind that attains the greatest power.

The highest need for reading is not that we shall store our minds with information, but that we shall come in contact with that knowledge of men and things which will develop our faculties, widen our vision, train our judgment, increase our wisdom, and enhance our mental grasp and resource.

The secret of a man's success is in the man *himself*. The particular methods he uses of course assist him in reaching his goal, but different men are guided by different methods, and no course of action is worth a picayune unless a man of strength stands behind it and electrifies it by his determination.

There are few men in the world who know how to use their time to good advantage. They waste precious minutes and hours without knowing it, and their familiar remark is, when asked why they did not perform this duty or that, "I haven't time for it; I am too busy." They *do* have the time, but they don't know how to use it.

Determine to succeed and you **WILL** succeed. Once make up your mind, *and keep it made up*, and no power on earth can hold you back. **DETERMINATION** is the word—this is the only "secret of success"—this is the philosopher's stone—this is the thing which will push and drive you uphill and through obstacles and over defeats.

Far from being a reason why a man should be kept down, obstacles, indeed, supply a reason why we should succeed—that is, if he has the latent possibility of success in him. Put obstacles in a man's way and he has to overcome them; and in overcoming them he develops a strength and a resource which are his very best equipment in the race for success.

Stern self-denial, determined effort, the constant putting forth of one's best powers; simplicity, virtue, toil, struggle—these are the elements of success, for the individual no less than for the nation. And the individual or the nation which forgets or ignores this truth must expect to pay the penalty. There is no alternative. Royal roads to achievement, like those to learning, can end only in disaster.

When we have come to know perfectly that to kick against the pricks is not only useless, but is wasteful of time and energy that should be husbanded and used to better advantage, and when we have been brought to realize that we must keep pace with changing conditions if we are to succeed in the struggle for existence, the battle of life is already half won. To bring ourselves to this realization is then our first duty; and the rest shall follow in due time.

Habit—and by habit I mean the combined results of custom, inclination and nature, hardened through long and constant usage into definite characteristics—habit is the strongest motive power in our lives. The vast majority of things we do spring unconsciously and inevitably from habits of mind and body. How essential is it to our success and happiness, then, that we form habits which will lead us naturally to do the wise, the good, and the right thing!

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THE MONTH'S HISTORY

BUCKING THE TRUST.

C. M. Rawlins, a graduate of the department of pharmacy of Columbia University, has been in business in Cleveland for fourteen years. His cigar sales are said to amount to a hundred thousand a year, but none of his brands are trust made. In fact Mr. Rawlins has always had a marked indisposition to such goods.

Imagine Mr. Rawlins's feelings, then, when he came down to work one morning to see a sign near his drug store: "This room will be occupied by a United Cigar Store. Wait for our opening. A present for every one." This was the signal for a fight and Rawlins was not the man to evade it. He wrote a letter of protest to U. S. District Attorney Denman, who said it looked like a restraint of trade to

close the proposed store. Rawlins then went to his attorney, who told him to forget the trust. Still not discouraged Rawlins laid his case before Attorney-General Wickersham. He promised an investigation. Shortly a letter was received from Denman, who was evidently coöperating with Wickersham in favor of the druggist. Finally through Mr. Rawlins's initiative, it is alleged, the United Cigar Stores Company was adjudged to be a part of the tobacco trust and enjoined from extending its operations or making further contracts with the parent company. This decision was in Rawlins's favor. The proposed trust store at E. 55th Street disappeared. Rawlins had won out. As a result of this decision, no new establishments will be opened by the United Cigar Co. until the expiration of the six months given by the court for the reorganization of the trust. For the Supreme Court has forbidden the American Tobacco Company from enlarging its own business or that of its subsidiaries until the reorganization ordered by the court has gone into effect. Mr. Rawlins had been shrewd enough to see this point, and realized that under the decision the Trust was constrained from opening any new stores. There was little litigation involved, as the counsel of the United Cigar Co. accepted the ruling of the Department of Justice without contention. This department had made it plain to the Trust that if it persisted in its attempt to open new stores, the government would apply to the courts for an injunction that would check all further expansion.

* * *

OPPOSING THE SHERLEY BILL.

At the last annual meeting of the Michigan State Pharmaceutical Association the members took a firm stand against the Sherley Bill. Other States are showing the same animadversion to the measure. A protest against the Sherley stamp tax bill was ordered sent to all the Maryland representatives in Congress. The New York State Pharmaceutical Asso-

ciation also went on record against the stamp tax on proprietary remedies. It will mean just so much money exacted from the pharmacist. It must come out of his pockets because it will be impossible on practical grounds to increase the retail price of proprietaries proportionately to the amount of the tax. To pass resolutions in the State meetings in condemnation of the Sherley Bill is insufficient. Personal appeal to the congressman and members of the State legislature will do more to kill the bill than will the more formal motions of the pharmaceutical bodies. The members of the legislature cannot always tell what interests are behind a convention to prevent a tax of this character, but they lend a willing ear to any argument that the individual druggist may advance against the bill. The State associations are therefore doing their utmost to kill the Sherley Bill not only in convention assembled, but they are urging their constituent members to use their personal influence with those in power.

* * *

TURLEY BILL AND THE "WORLD."

The Turley Bill fathered by the *New York World* and fought by the druggists everywhere met a peaceful death finally at the hands of the New York legislature, as was reported some time ago.

The *World* is to be forgiven for its recent attack on pharmacy. In this age sensationalism is one of the characteristics of the press. The penny sheet champions of the people's rights must have a certain amount of scandal to satisfy the appetites of blasé readers. And if the current supply of human depravity is insufficient to furnish material for extra editions, events in pharmacy must be pressed into service. Druggists need not be surprised, therefore, if papers that excite mobs to violence, pit class against class, stir up the poor against the rich, invade the sanctity and privacy of homes, particularly of the upper classes, for facts better left unsaid but none the less stimulating to the jaded curiosity of the paper-buying public, should enter even the quiet drug store in quest of news. Not a few druggists are on the *qui vive* lest the recent startling revelations of certain newspapers be the beginning of a national movement on the part of the press to extract sensational themes from the conduct of the pharmacist. The

newspapers no doubt have a grievance against pharmacists of this country because they furnish very little of the sensational material that feed columns of penny papers and swell their circulation. You never hear of a druggist setting fire to his store. You never read of a murder with all its interesting side-lights in which a druggist participated unless in the person of the victim. You never hear of a druggist's daughter eloping with a chauffeur. A group of drug clerks have never been known to hire an automobile and go out on a wild and hilarious joy ride only to end up by winding the car around a lamp-post. And as for a divorce or a juicy family scandal, such a thing is unheard of in druggdom. So considering the virtue and rectitude of American pharmacists, the newspapers have reason to feel that the druggists of this country have never furnished their share of news for the glaring headlines and sensational columns of the leading dailies.

Let every druggist look to his shop and make sure that everything is above reproach. The reporter must be made to realize that the pharmacy is a poor place in which to seek material for the press.

* * *

MORE CONVIC- TIONS.

An amusing feature of recent news is found in the fact that some time after the Supreme Court had declared therapeutic claims not to be involved in the food and drugs act, the Department of Agriculture sent out a grist of judgments recorded against a considerable number of patent medicine manufacturers whose offense was that they had made exaggerated curative claims for their products. These judgments were all rendered, of course, prior to the decision of the Supreme Court, but they were not published until afterwards. One of the cases was a libel suit against a number of packages of an aphrodisiac manufactured by a concern which called itself by the very appropriate title of "The Sporty Days Invigorator Co." The government held that the product was misbranded in that it had no aphrodisiac properties, was not a cure for disease, and had none of the virtues claimed for it on the label. The manufacturers pleaded guilty and judgment was therefore filed against them by the court.

In another case, however, the defendant manufacturer fought the contention of the government and won out. This was a libel filed against some packages of Buffalo Lithia Water. The Supreme Court of the District of Columbia rendered a decision in favor of the manufacturer and based it largely upon the Supreme Court decision in the Johnson cancer case. The court held that there was no standard for lithia water in the Pharmacopœia; that no curative claims were made for the product on the package; and that if they had been made they could not be reached through the food and drugs act.

* * *

TEN-CENT SODAS IN DETROIT.

Soda dispensers all over the country may be interested in a movement among the drug

stores in Detroit to make ten cents the regular price of ice-cream soda in this city. Five cents was the charge until recently when several fountain owners got together and agitated a movement to raise the price to ten cents. Everybody is falling into line. A few candy stores are still selling five-cent ice-cream sodas, but the beverages are distinctly inferior to the quality that is dispensed at drug-store fountains.

As for the people, they are perfectly willing to meet the raise in price. Certainly they ought to be. A sundae brings ten cents, but the price of the material that enters into a sundae hardly exceeds that of an ice-cream soda. And if people are willing to pay ten cents for the one, they should be equally willing to give as much for the other. In most of the largest cities ice-cream sodas cost ten cents, and this should be the universal price. In Detroit several druggists have put up signs reading: "Ice-cream sodas, 10 cents."

This saves any further explanation. People see when they sit down at the fountain that the beverage costs two nickels, which prevents any altercation after the soda has been dispensed.

* * *

MEETING OF AMERICAN CHEMICAL SOCIETY.

At the recent meeting of the American Chemical Society in Indianapolis, the Division of Pharmaceutical Chemistry had three most interesting sessions with an attendance of from twenty to fifty members and visitors. B. L. Murray, of Rahway, N. J., was the presiding

officer, and in his remarks at the first session congratulated the division on having doubled its membership since the beginning of the year, the present membership being over 150. A paper on Pharmacopœial Revision by Prof. Joseph P. Remington induced a very interesting general discussion on pharmacopœial matters. A luncheon was then served to the members and visiting ladies at which a number of the most prominent pharmaceutical men of the country were speakers. Every one in attendance at this meeting agreed that the division had become a very important factor in pharmaceutical progress. The next meeting will be held in Washington during the Christmas holidays, and it is hoped that it will have the support of all persons interested in the development of pharmaceutical chemistry.

* * *

PROMINENT CHICAGO PHARMACIST DEAD.

Last month members of the C. V. D. A. buried their oldest charter member, Anton Hottinger. The funeral at the house and church was in charge of a clergyman. At the open grave, according to the wish of the deceased and family, the services were under the auspices of the C. V. D. A. Among those present was Otto G. Hottinger, son of the deceased, himself an active member of the C. V. D. A. President I. N. Jamieson conducted the exercises, and called on Honorary President O. F. Fuller, who made a brief but very impressive address. At the request of the family W. Bodemann closed the services in German. As he stepped to the grave, he dropped into it a red carnation, the official flower of the C. V. D. A. The members of the organization, who were all pallbearers, then came forward, and after the custom of their association, paid this last tribute of friendship and respect to their dear old comrade.

* * *

MAPLE SYRUP SOPHISTICATIONS.

Owing to the scarcity of true maple sugar there have been attempts to compound a substitute, and some of the artificial maple flavors on the market are very successful. But the label must be free from any falsity or equivocation. The Bureau of Chemistry of the United States Department of Agriculture has been examining maple syrups on the market, with the result that several manufacturers

have been convicted of adulteration and misbranding. In some instances there was 50 per cent of cane-sugar present in supposedly pure maple sap. Several hundred cases of maple syrup were seized, condemned, and sold at public auction, the proceeds going to the government.

* * *

SCHOLARSHIPS.

The Committee on Scholarships of the New York State Pharmaceutical Association is doing excellent work. It reported at the recent annual meeting of the Association that three scholarships had been secured last year and that four would be available this year. These four will be given by John L. Thompson & Sons, Samuel E. Bradt, the Kings County Pharmaceutical Society, and the Alumni Association of the New York College of Pharmacy. In the meantime the Massachusetts State Association has voted to continue its scholarship in the Massachusetts College of Pharmacy. We recall, too, that the New Jersey and Texas Pharmaceutical Associations maintain scholarships, and possibly there are others. The idea is commendable in every respect.

* * *

NEW DEAN FOR THE CLEVELAND SCHOOL.

The Cleveland School of Pharmacy has been fortunate to procure as Dean Dr. Norman A. Dubois, S.B., M.A., Ph.D., formerly of the Case School of Applied Science. Dr. Dubois's wide experience and efficient work in several of the leading seats of learning in this country, including Brown, Syracuse and New York Universities, renders him preeminently qualified to take charge of the school. His teaching has extended not only along lines of pharmaceutical chemistry and physics, but also along the most advanced branches of chemistry. Dr. Dubois is one of the best selections possible and has been elected to maintain a high standard in the school work.

* * *

REORGANIZING THE AMERICAN TOBACCO CO.

The officers and attorneys of the American Tobacco Co. are perfecting a plan for carrying out the decree of the United States Supreme Court ordering a reorganization of the Trust in harmony with the law. The decision ordering this readjustment was

rendered May 29, and the company was given until December 29 to carry it out. Some idea of the size of the American Tobacco Co. may be seen from the following figures: There are \$103,220,100 worth of outstanding bonds. The preferred stock amounts to \$78,689,100; the common stock \$42,242,400. What an enormous undertaking must be the readjustment of such a large combination whose securities are distributed all over the world!

* * *

THE PARCELS POST SITUATION.

The druggists of this country have been much concerned over the parcels post question. They appear to be divided on the subject. Some States are favoring parcels post, others oppose it. From present indications there is little likelihood of the country plunging bodily into the new system. Congress is showing a desire to try it out experimentally first. Bills are up for consideration that do not look for an establishment of a complete parcels post, the idea being to try it out in a restricted way first. The sudden adoption of a parcels post without due limitations represents a radical move that Congress is not yet prepared to make.

* * *

ADULTERATION OF ICE-CREAM CONES.

The Department of Agriculture appears to be conducting a systematic campaign of prosecution against manufacturers of boric acid ice-cream cones. It has seized upon crate after crate of the goods in various parts of the country, samples being submitted to the Bureau of Chemistry. Where the findings of the analyst revealed boric acid the product was condemned as injurious and adulterated within the meaning of the Food and Drugs Act. The cones preserved with the deleterious boric acid were seized and destroyed. In some instances fines were imposed on the manufacturers.

* * *

The New York State Pharmaceutical Association has voted to employ a State canvasser for the purpose of securing new members and of developing interest generally in the work of the organization. The Pennsylvania Association employed a canvasser for two or three months last year, and the net results were that over 400 new members were elected at the annual meeting a few weeks ago.

EDITORIAL

A STIMULANT RATHER THAN A DEPRESSANT.

A year or two ago, when there was a sudden growth in the chain-store movement in the East, more or less fear was exhibited that the situation would ultimately bear hard upon the small individual druggist. We argued at the time that these fears were without much foundation in fact, and we have been pleased to see that a saner view of the conditions is gradually being taken.

The subject was interestingly discussed at the annual meeting this summer of the New York State Pharmaceutical Association. C. A. Drefs of Buffalo read a paper of which the thesis was that the chain-store system could never take away from the retail druggist the personality he chose to exert. If good business methods were followed, and professional pharmacy practiced, the outlook for the druggist would not be darkened, and Mr. Drefs believed that there was just as much money to be made in the drug business as there ever was.

The resulting discussion was of course somewhat varied in character, but on the whole the consensus of opinion was apparently in support Mr. Drefs's contentions. Dr. W. C. Anderson was inclined to think that the individual pharmacist could save himself by more attention to the professional aspect of his business, and he spoke warmly of the importance in this connection of propaganda efforts with physicians. Others seemed to feel, however, that it would not be enough to cultivate professionalism alone, but that the druggist must compete in every particular with the chain-stores and the big down-town establishments. Every feature of the business must be developed aggressively, and if this were done there need be no fear of competition from any source whatsoever.

Thomas Stoddart, of Buffalo, hit the nail squarely on the head when he declared pungently that the chain-store would prove to be "a stimulant rather than a depressant to the retail druggist," for it would show him the necessity of greater hustling and would develop him into a shrewder business man and

a better pharmacist. This indeed has been the history of commercial success in the United States from colonial times onward. New competition, larger enterprises, better methods have always acted as tonics, and have stirred American business men on to greater and greater efforts.

THE GRADUATION PREREQUISITE MOVEMENT.

It is very apparent that the enactment of legislation looking toward the establishment of the graduation prerequisite is going to be a matter of slow growth. Five or six years ago, when New York and Pennsylvania followed each other in rapid succession, and when the territory of Hawaii and the State of Rhode Island came along soon afterwards, it was thought by some pharmacists that the movement would spread with more or less rapidity. Before any new era of this kind can be ushered in, however, public sentiment—in the present case pharmaceutical sentiment—must be developed in favor of it, and this truth is being evidenced every year as one effort after another is made to enact graduation prerequisite laws.

We have already reported in the BULLETIN that during the last winter prerequisite bills failed in the legislatures of Illinois, California and Washington. The winter before other measures likewise failed in the legislatures of Michigan and one or two other States. In practically every instance success was unrealized because too little support had been developed. Public sentiment had not yet become strong enough. The pharmacists in all of these States, however, are still discussing the question, and it may be expected that the agitation in favor of the graduation prerequisite will continue. In most of the States where legislation has already been attempted the State associations have decided this summer to continue the fight.

The proposition has been up in New Jersey for a number of years, and was apparently brought to a head at the recent annual meeting of the State association. Last year the association instructed its Committee on Legislation to prepare a pharmacy bill providing among other things that candidates for registration as proprietors must have graduated from recognized colleges of pharmacy. This

year, when the committee reported, it presented a bill containing the graduation feature, but with the modification that registered assistants having had three years' experience before registration might, after three years of additional experience in New Jersey itself, come up for examination as registered pharmacists. A motion to strike out this qualification precipitated a hot debate, but the motion was finally carried by a vote of something like 44 to 26. The Committee on Legislation will introduce the measure at the next session of the State legislature, and the bill will consequently call for the graduation prerequisite in its pure form without modification or qualification.

Since the failure of a graduation prerequisite measure in the Michigan legislature two or three years ago, there has been more or less doubt that the pharmacists of the State were in favor of such a bill. In order to settle the question the State Association last year decided to take a vote by mail. Unfortunately the voting papers were sent out in reports of the State Board of Pharmacy, and apparently many druggists failed to find or see them. As a consequence only 261 druggists voted, but it is a fact of possibly considerable significance that 200 expressed themselves in favor of prerequisite legislation, whereas only 61 voted against it. If this accurately represents the proportion of sentiment for and against the movement, it would seem that success is not far distant.

We may say in conclusion that much of the sentiment against the graduation prerequisite is based upon a misconception. Many druggists apparently think that clerks will be involved as well as proprietors, and that there will be a consequent difficulty in getting assistants. On the contrary, however, every graduation prerequisite bill, so far as we recall, would have made graduation compulsory only in the case of registered pharmacists, or in other words proprietors. Assistant pharmacists are not brought within the scope of such legislation at all, so that a clerk may still continue as such without going through a college of pharmacy. Furthermore, even if this were not so, it is an open question whether the imposition of compulsory graduation would not increase instead of decrease the clerk supply by making the pharmaceutical profession more attractive to the right kind

of young men. It must be pointed out, too, that no graduation prerequisite law would be retroactive. It would not affect men who are now registered, and would only apply to board-of-pharmacy candidates of the future.

THE ELEMENTS OF A REPUTATION.

J. Leon Lascoff, a pharmacist well-known in New York State for his professional and scientific activities and a member of the Board of Pharmacy, read a paper at this year's meeting of the State Association outlining the "essentials of a reputable pharmacist." Mr. Lascoff gave it as his opinion that in the last analysis reputation must determine the pharmacist's success. Such aids as capital, location and the like were quite in vain unless backed up and supplemented by this fundamental requisite.

The essentials of a good reputation for the pharmacist were declared by Mr. Lascoff to be ten in number:

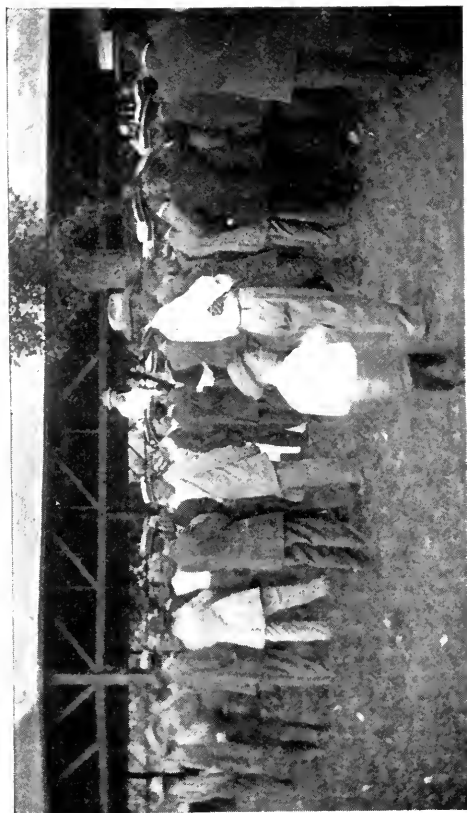
1. Making proper window displays.
2. Practicing sanitation in store and prescription room.
3. Close attention to and personal supervision of the store.
4. Proper advertising to physicians on new preparations and drugs.
5. *Honest* advertising.
6. Buying only the best drugs and chemicals in the market.
7. Courtesy and amiability to customers.
8. Avoiding the "just as good" habit, and misrepresentation.
9. A checking system in the prescription department.
10. The proper standardization of drugs, chemicals and preparations.

These ten suggestions are the fruit of many years of experience, and Mr. Lascoff declared that he had time and again had their importance forced home to him when dealing with clerks, and more recently when examining candidates for registration by the Board of Pharmacy. That Mr. Lascoff is himself qualified to give advice in these particulars is somewhat evidenced by the fact that he has dispensed 236,000 prescriptions within relatively few years' experience as a proprietor. One of his pharmaceutical window displays was reproduced in last month's issue of the *BULLETIN*, and was unusually attractive.



Dr. J. D. Humphrey.

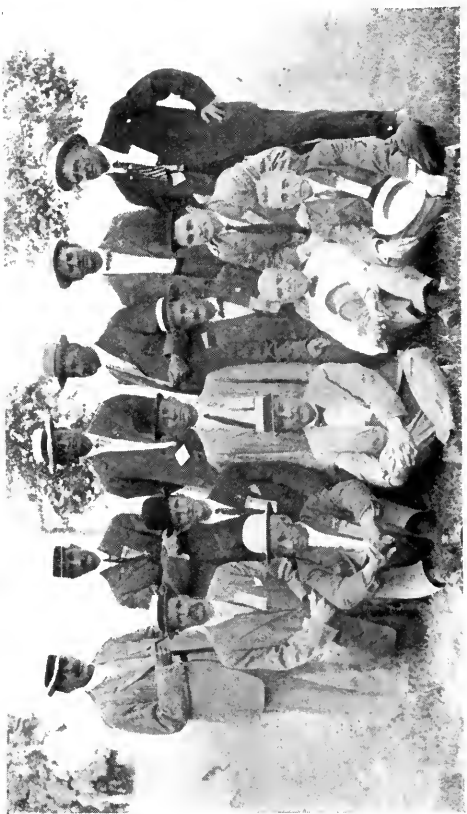
The Alabama leader and N. A. R. D. man in his rôle as Mediator between Pharmacists and Physicians.



This year's convention of the Nebraska State Pharmaceutical Association was held in the town of Fairbury in the southern part of the State. A. V. Pease, well-known to the members of the A. P. A., and one of the prominent citizens of Fairbury, was mine host par excellence. In the present picture the members are watching one of the athletic events, and Mr. Pease may be seen on a rostrum in the center of the crowd looking like an auctioneer.



This group, sitting comfortably in the shade in order to watch a 100-yard race, comprises Mrs. A. V. Pease, Mrs. Harry B. Mason, Mrs. Charles R. Sherman, A. V. Pease, Charles R. Sherman, and Prof. Charles B. Fricke.



First row standing, left to right, Harry B. Mason, the special guest of the association, Charles R. Sherman, D. J. Killen, W. D. Mowry, Professor Redfern, S. C. Wilson; second row, on their knees, left to right, J. G. McBride, J. E. Harper, G. B. Christoph, A. W. Buchheit, Herbert Lock; third row seated, W. M. Widener, D. J. Fink, A. V. Pease, L. W. McConnell.



Here we have, reading from the left, Professor Fricke again, Charles R. Sherman, D. J. Fink, the editor of the BULLETIN, Professor Kreitzinger, Dr. R. A. Lyman, and Francis Hedges.



Some of the A. Ph. A. Members at the Boston Meeting Last Month.

THE BOSTON MEETING OF THE A. PH. A.

Eloquent Address of Dr. Solomon Solis-Cohen the Feature of the Week—James H. Beal Elected General Secretary and Editor of the Proposed "Journal of the A. Ph. A."—The Colleges Decide to have Themselves Investigated—A Federation with the N. A. R. D. Proposed—The N. F. Nearly Ready for the Printer—A National Conference on Legislation to be Called—Denver Selected for Next Year.

The Boston meeting last month of the American Pharmaceutical Association was interesting and profitable on the whole, although it failed to develop anything remarkable or sensational. Perhaps the most delightful feature of the week was an extemporaneous address delivered by Dr. Solomon Solis-Cohen of Philadelphia on the Relationship of the U. S. P. to the Physician. Dr. Cohen's speech of thirty minutes or



The Hotel Vendôme, where the convention was held, and where most of the members were quartered.

more was a model of clear thinking, happy phrasing, and convincing logic. As everybody knows, he is chairman of the very important Sub-committee on Scope of the U. S. P., and it has been the duty of his committee during the last year to decide what articles shall be admitted to the next revision, and what shall be deleted therefrom. Decisions have now been reached in all except a few cases, and the two lists of admissions and deletions will be found printed elsewhere in the present issue of the BULLETIN. The articles to be included in the next U. S. P. are now ready for detailed consideration by the various sub-committees of revision, so that from now on the work can be conducted with considerable speed.

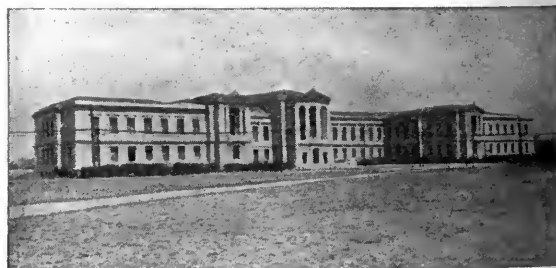
DR. COHEN'S ELOQUENT ADDRESS.

Dr. Cohen's address was an eloquent plea for the intelligent use of drugs on the one hand, and for a reasonably broad Pharmacopœia on the other. He declared that in this skeptical day there were doubts in some quarters of the remedial virtues of medicinal substances, but he caustically remarked that there was scarcely any subject about which so much nonsense had been written. Drugs are frequently abused, it is true, but this should not condemn their proper and wise

employment. Other remedial measures so popular today are likewise capable of great abuse. Air, light, water, massage, mechanical manipulations, mental suggestion, electricity—in these and in all other drugless measures mistakes are quite as frequently made as in the employment of drugs. Neither extreme is sound, and the truth is as usual to be found in the middle of the road. The wise physician is the man who uses all remedial methods when necessary to combat disease, and who uses them with discrimination and intelligence.

Dr. Cohen made it clear, however, that in order to use drugs intelligently they must be studied with more care than has frequently been devoted to them. He stated that for twenty-five years at least medical students had failed to receive the enthusiastic and thorough instruction in medicinal substances to which they were entitled. A thorough knowledge of drugs could be based only upon laboratory experimentation on the one hand, and bedside experience on the other. Either alone was insufficient. Both must be taught, and it has largely been the unwise dependence upon one or the other which has made the physician's knowledge of drugs incomplete and has assisted in the spread of skepticism. "From Vienna," pungently declared Dr. Cohen, "has spread the infection of therapeutic nihilism quite as effectively as cholera has come from the tainted wells of Mecca."

Dr. Cohen indulged himself in an eloquent panegyric of the country doctor. He declared that he had often met with him in consultation and that he knew him and his methods thoroughly. He asserted that the country practitioner frequently uses some drugs which



The Art Museum in Boston, one of the places of great interest in the city.

might be considered obsolete, but he does so from long experience and thorough knowledge, and he gets results. Dr. Cohen aroused great applause when he asserted that he himself would be the last man to deny recognition in the Pharmacopœia to the drugs used so wisely by the country doctor. He believed also that the U. S. P. ought to include all of the accepted biological

substances. So far it has been decided only to add antitetanic serum to the antidiphtheric serum recognized in the last revision. Dr. Cohen concluded his address with the eloquent assertion that he wanted to see every substance recognized in the Pharmacopœia which was really useful in the intelligent treatment of disease.

The address was vigorously applauded for several minutes, after which John Uri Lloyd, John B. Bond,



The Massachusetts College of Pharmacy at the corner of St. Botolph and Garrison Streets in Boston.

Sr., Dr. F. E. Stewart, James M. Good, and others spoke most enthusiastically of Dr. Cohen's remarks and seconded a motion to give him a rising vote of thanks. In addition to this it was voted to request the committee on publication to secure as wide publicity as possible for the address, and particularly to request its insertion in the *Journal of the American Medical Association*.

THE NEW "JOURNAL OF THE A. PH. A."

Perhaps the most important feature of the meeting, so far as the future welfare of the association is concerned, was found in the final perfection of plans for the issuance and publication of the "Journal of the American Pharmaceutical Association." The new official organ will begin its career on the first of January next, and it will be under the wise editorial and business management of Prof. James H. Beal. Upon the selection of the editor-in-chief practically depends the success of the whole enterprise, and the association is to be congratulated that Professor Beal was willing to make the financial sacrifice involved in the acceptance of the position. There is perhaps no man in the country who has a better equipment of sound sense, loyalty to the organization, literary capacity, and constructive ability. That he was willing to give up most if not all of his various interests, and devote himself unreservedly to this enterprise on behalf of the A. Ph. A., speaks volumes for his devotion to the cause.

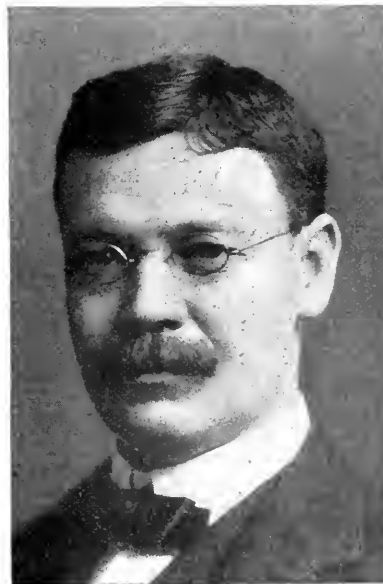
The position of editor was combined with that of general secretary. Charles Caspari, Jr., who has been general secretary for a period of nearly twenty years, unconditionally refused to continue longer in office.

He insisted that he had served long enough, that his new duties as food and drug commissioner of Maryland consumed so much of his time that it became necessary to cut corners, and that in any event the position of editor and general secretary ought to be combined in the interests of effectiveness and economy. It was decided that the new incumbent of the *Journal* position will receive \$3000 a year. This is, of course, too small a figure to remunerate the services of a man of Professor Beal's character and ability, but it is generally believed, with how much truth we are unable to say, that he is financially independent to a greater or less degree, and is apparently able to make a sacrifice of this kind.

In response to a recommendation of President Eberle, it was decided to appeal for subscribers to the *Journal* outside of the membership of the organization, and it is hoped that the publication of an official paper will ultimately result in a considerable enlargement of the membership. It was generally felt that there were opportunities in the proposition, and that Professor Beal was just the man to develop them. Two offers of free offices for the *Journal* were made by the Pittsburg College of Pharmacy and the Pharmacy School of the Ohio State University in Columbia. Professor Beal was given only a beggarly allowance of \$750 for clerical assistance, which means one stenographer, but he will doubtless be able to show next year the necessity for more help and more liberal appropriations.

TO INVESTIGATE OR NOT TO INVESTIGATE?

One of the most diverting features of the Boston meeting was developed on Wednesday evening at the session of the Conference of Pharmaceutical Faculties. The executive committee brought in a report recom-



James H. Beal, elected to the new joint position of editor of the proposed *Journal* and general secretary of the association.

mending among other things that the Carnegie Foundation be requested to conduct such an investigation of the pharmaceutical schools and colleges as it had made a year ago of the medical schools. At once the audience began to sit up and take notice, and everybody

apparently wondered how everybody else was going to vote on the proposition. For half an hour there was a parliamentary situation which taxed the coolness of Acting-chairman Wilbur J. Teeters. Motions to amend, to table, to postpone, and the like, followed one another in rapid succession, and there were frequent differences of opinion regarding which motion should be given preference and which was out of order. When votes were taken they were so indecisive that divisions were demanded, and then, when the roll was called, there was frequent hesitation over being put on record.

It is fair to say, however, that this uncertainty did not all result, nor perhaps much of it, from an unwillingness to be investigated. Some of the speakers conscientiously felt that the Carnegie Foundation knew nothing about pharmaceutical education and was in no position to conduct an intelligent survey. Others declared that no good would come out of such a whirlwind anyway and that colleges found wanting would still continue to do business at the same old stand. When the test vote was finally made, and the roll called, it was found that thirteen favored the investigation, while eleven opposed it. The proposition therefore carried, although the original motion was so amended by a small majority that the Conference itself will set the standards by which the investigation is to be made and upon which the results are to be judged by the Foundation. In other words, the Carnegie people will be requested in making their measurements to use the yardstick of the Conference instead of any similar instrument of their own.

DR. SCHLOTTERBECK'S SENSATIONAL CHARGE.

What lent more or less interest to this whole situation was the charge contained in the address of President Schlotterbeck, that some of the schools in the

make specific charges so that the Conference could act on them. It has a regular form of procedure for cases of this character. Dr. Schlotterbeck, it may be explained, was through illness unable to be present at the meeting. He was at the time just recovering from an operation for appendicitis.

Another declaration of President Schlotterbeck was to the effect that the use of the degrees



Prof. J. B. Schlotterbeck, whose address as president of the Conference of Faculties stirred up the animals.

Ph.D. and Ph.B. in pharmacy were fraudulent and should not longer be tolerated. This point of view was unanimously approved after some discussion. It was repeatedly declared that both degrees have a well established meaning in education, and that to use them for relatively short courses in pharmacy was entirely without excuse. It ought to be explained, however, that approval was given to the use of the degree of Doctor in Pharmacy, provided the title of "P.D." or "Phar.D." is employed, so that there would be no confusion with the well known "Ph.D."

WORK NEARLY COMPLETED ON THE N. F.

It is of considerable importance to state in connection with the Boston meeting that the revision committee of the National Formulary gathered several days before the convention opened and did a lot of good work in clearing the decks for action. Every moot question was settled, and the committee is now in position to go ahead and bring out the book. It will probably be published by or soon after January first next. It had been expected to make its appearance before this, but the difficulties of doing revision work by tedious correspondence are very great. The members of the committee seemed to feel very well satisfied with their work in Boston, and among other things it is particularly interesting to report that it was decided after a good deal of argument to retain Compound Digestive Elixir in the next revision. It will be remembered that this product has been declared to be worthless by the Council on Chemistry and Pharmacy of the American Medical Association. Practical physicians, however, still insist that the substance is really efficient and useful, and they continue to employ it liberally. The formula in the new edition of the N. F.



R. H. Walker, president-elect of the National Association of Boards of Pharmacy.

conference ought not to be there. Only twenty-five or thirty of the eighty or more institutions in the country are included in the membership, and these are supposed to be the real elect. The president asserted, however, that even some of these were at least open to question. This caused ears to be pricked somewhat, and a recommendation was adopted to ask Dr. Schlotterbeck to

will be slightly changed, however, and the dog will be given another name.

THE U. S. P.

In this connection it might be reported also that the committee of revision of the U. S. P. held one or more meetings at the Boston convention, while several of the sub-committees likewise had sessions. The revision committee is now ready, as has already been



Prof. Wm. B. Day, one of the three nominees for president.

stated, to begin rapid and continuous work on the book, since all but final decision has been reached on such articles as are to be included in the next revision.

THE SYLLABUS MOVEMENT.

One of the most promising pieces of work done under the auspicious of the A. Ph. A. is that involved in the publication of the Syllabus. As everybody knows, or ought to know by this time, the Syllabus outlines a course of study in pharmacy and allied branches which will be used by the colleges on the one hand, and on the other followed by the boards in their examinations. Thus something like uniformity and coöperation will succeed the chaos which has heretofore existed. The first edition of the Syllabus was published two or three years ago, and it is now undergoing revision by a committee of twenty-one representing the A. Ph. A., the Association of Boards, and the Conference of Faculties.

Dr. H. L. Taylor, Secretary of the Syllabus Committee, rendered reports to all three bodies in Boston, indicating among other things that twenty-five of the State boards of pharmacy throughout the country have now adopted the Syllabus in full or in part, and are using it in their examinations. Of the schools, forty-six have adopted the syllabus as far as practicable at this time, and all of these institutions are coöperating in the revision and perfection of the book. This seems to us a very good showing.

SOME CRITICISMS.

In the Section on Education and Legislation a paper was read by E. Fullerton Cook, criticizing that portion of the syllabus which outlines a course in commercial training and jurisprudence. Afterwards Dr. C. B. Lowe likewise criticized the course in physiology. It

was pointed out by Harry B. Mason, however, that these criticisms should not be misinterpreted as applying to the syllabus movement as a whole. The first edition of the book was understood by everybody concerned to be merely tentative, and it was for this reason that the Syllabus was now undergoing careful revision. The committee of twenty-one would be glad to receive the criticisms and the coöperation of any one in order to make the book more nearly perfect. Mr. Mason declared that the Syllabus movement meant a great deal towards future unification of action between the boards and colleges of the country, and in the direction of a gradual elevation of standards. Of course it was going to be difficult to get so many interests to agree upon any one course in detail, but harmony would ultimately be created out of discordance, and the movement was pregnant with good. Mr. Cook's paper was thereupon referred to the sub-committee on pharmacy of the Syllabus committee of twenty-one.

FINANCES AND MEMBERSHIP.

The Treasurer, Dr. H. M. Whelpley, was able to make a very gratifying report concerning the financial and membership situation. During the last year the permanent funds of the Association have increased by \$1069.63 and now amount to \$29,623.37. The available cash assets have increased \$1953.25 and now amount, together with the invested funds, to \$15,701.08. This makes total association assets of \$45,324.45. In addition to these figures there are special funds held in trust, and of these the Procter Monument Fund amounts to \$4478.91 and the Hallberg Memorial Fund,



John C. Wallace, chairman-elect of the Section on Education and Legislation.

raised during the last year, to \$3914.70. Respecting the latter it may be said that it was intended originally to raise \$3500 to pay off the mortgage on the Hallberg home, but since this amount has already been exceeded by \$500 or so, it is hoped that the collections may be continued until the fund amounts to \$5000.

As for the membership, Treasurer Whelpley reported that there were now 2353 active members, and

life and honorary members enough to bring the total membership up to 2490. In the meantime Chairman W. B. Day, of the general membership committee, reported that four hundred and twenty new members had been secured during the last year, at the relatively slight expense of less than two hundred dollars.

PRESIDENT EBERLE'S RECOMMENDATIONS.

President E. G. Eberle, of Dallas, Texas, made many recommendations in his annual address. Most of them were favorably acted upon by the Association. It was voted, for instance, to approve of the idea that a committee of fifty-three, one from each State and territory, be appointed to report next year on the best methods of dealing with such troublesome legislative questions as those having to do with itinerant vendors, the liquor question, artinarcotic reform, and pharmacy board examinations. This committee will also consider the advisability of having a model bill drawn up which would represent a codification of existing laws affecting pharmacists, and which among other things



C. Louis Diehl, who presided as chairman over several meetings of the Committee on the National Formulary.

would perhaps provide that the present boards of pharmacy be succeeded by commissions of pharmacy with considerably enlarged powers. A resolution was also adopted at the president's suggestion approving the present movement to so amend the food and drugs act as to bring therapeutic and curative claims within its scope. The proposition to issue a general recipe book, which has received more or less attention during the last year or two, was approved, but the idea is not to be carried out for some time. The proposition to establish a national department of health was favored, but it was suggested that pharmacy should be recognized by a bureau.

TO FEDERATE WITH THE N. A. R. D.?

Perhaps the most important of Professor Eberle's recommendations was this, that a joint committee of the A. Ph. A. and the N. A. R. D. meet to discuss the advisability of forming a federation of pharmaceutical associations, in which both the A. Ph. A. and the N. A.

R. D. should retain their separate functions, but would be joined together something like a Senate and House of Representatives, with the State associations tributary to them. This proposition was adopted, and overtures will be made to the N. A. R. D.

A NATIONAL LEGISLATIVE CONFERENCE.

An important decision was reached in providing for a national conference in legislative matters. This idea was advanced in the report of the Committee on National and State Legislation, of which Henry P. Hynson was the chairman. It is proposed to have the conference comprise five representatives each from the several national organizations in the drug trade, together with one from each of the State associations. It was a part of the original motion that the chairman of the section on education and legislation be the chairman also of the proposed conference, but at the suggestion of Dr. W. C. Anderson the selection of the officers of the conference was left to the conference itself. Where and when the conference will be held was left to the Council to decide. Such national bills will be discussed as those involving the establishment of a department of public health, amendments to the food and drugs act, patent and trade-mark legislation, anti-narcotic legislation, and the parcels post. It is probable also that State legislation will be considered. Mr. Hynson made the point that such a legislative conference ought to be undertaken under the auspices of the A. Ph. A., inasmuch as the organization represents in its membership all of the various branches of the trade. Other associations are exclusively devoted to some one branch.

JOINT CONFERENCE BETWEEN THE BOARDS AND THE COLLEGES.

It was very gratifying that a successful joint conference was held during the week between the boards and the colleges, under the auspices of the Section on Education and Legislation. Several similar attempts had been made in previous years, but they were always abortive. This year there was a pretty good attendance, and the time was taken up in discussing a model examination paper which had been prepared by a joint committee representing five board members and five teachers. A motion was made last year to have such an examination paper prepared for the guidance of the various boards of pharmacy. The discussion lasted for two or three hours, was indulged in freely by both professors and board members, and undoubtedly did a great deal of good. Of greater significance, however, was the willingness of the two bodies of men to get together and to discuss amicably subjects of mutual interest.

WORK OF THE BOARDS.

Reference has already been made to the joint conference between the boards and the colleges. It ought also to be said that the boards themselves had a very interesting convention. As usual, several sessions were held, and subjects of the utmost practical importance were discussed with great profit. The National Association has done admirable work in the unification of standards, in the perfection of examination methods, and in the interchange of certificates between the different States. At the Boston meeting 39 States in all

were represented. Of this number, 33 were active members and 6 associate members. Six State boards were added to the membership roll—Tennessee, Connecticut, Utah, Ohio, Iowa, and Wisconsin.

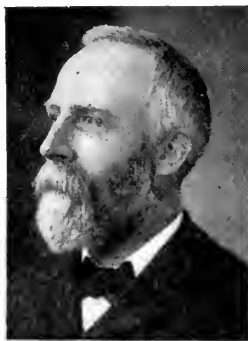
DR. WILEY SUPPORTED.

The present Wiley situation was mentioned on two or three occasions during the week, and was especially referred to in the address of President Eberle. At the session of the historical section, held on the boat returning from Plymouth Friday afternoon, a resolution was passed at the suggestion of Prof. J. P. Remington. This recited that the A. Ph. A. had always had for one of its primary objects the prevention of adulteration of drugs, that Dr. H. W. Wiley had been a valiant fighter for the cause, and that President Taft should sustain him in his admirable work of enforcing the food and drugs act.

THE SECTION WORK.

The usual character of good work was done in the various sections, but unfortunately we lack the space to go very much into detail. Many features of the session work of general importance, furthermore, have already been mentioned in this editorial summary of the convention, or will be referred to later on. The Historical Section, under the chairmanship of Joseph M. Lemberger, registered a departure when it held a unique meeting on board the boat Friday on the trip to Plymouth. In the evening of that day a special lecture under the auspices of the section was delivered by Dr. Edward Kremers on "The Apothecary in Literature." This was an interesting historical lecture illustrated by lantern slides.

The Section on Scientific Papers, under the chairmanship of A. H. Clark, held several interesting sessions, and a total of nearly thirty papers was presented. It is in this session that such important committee reports are rendered as those on the Drug Market, the



Chas. Caspari, Jr., who resigned the general secretaryship, and who was presented with resolutions of gratitude for his 17 years of able and faithful service.

U. S. P., Unofficial Standards, and the like. The committee on the Ebert prize awarded last year's honors to Messrs. Puckner and Warren for their paper on strychnine arsenate and copper citrate. The committee also recommended that in the future the prize be awarded on alternate years for papers in pharmacy, chemistry, pharmacognosy, and biochemical assay, one of these four divisions to be considered each year, and

in each case the contributions for the last four years to be dealt with. Under this arrangement it was thought that each branch of research would receive fairer recognition.

The Section on Practical Pharmacy and Dispensing, presided over by Louis Saalbach, was as usual the mecca for the practical pharmacists. They crowded in gratifying swarms to discuss every-day problems. One



Wm. Mittelbach, one of three nominees for president.

or two of the excellent papers read in this section we are giving space to elsewhere in this issue of the BULLETIN. Incidentally a little furor was created by the statement of Charles M. Ford, some time druggist but now drug inspector for the State of Colorado, to the effect that he made infusions of digitalis without alcohol. Several people proceeded to jump all over Brother Ford, and to declare that it was rather peculiar for a drug inspector to countenance the preparation of substances by other than official methods. Thereupon ensued a long debate as to whether alcohol was added to this product for purposes of preservation or not.

SUNDAY CLOSING.

The Section on Commercial Interests developed several discussions of practical importance. Dr. C. B. Lowe read a paper which started a debate on the question of Sunday closing. P. Henry Utech, F. H. Godbold, Charles Holzhauer, and other speakers declared that they had had the courage to close their stores on Sunday, either altogether or for a portion of the day, and that they had found nothing to be lost by it. They all echoed the sentiment that the one thing that prevented Sunday closing was the fear on the part of most druggists that their neighbors would get the business. What was needed was a little more courage and backbone. Mr. Holzhauer said that he had never opened his store on Sunday during his forty-three years of business, and he remarked that he was still on the job, while others who had pursued a different policy had come and gone.

BORROW MONEY TO MAKE MONEY!

A couple of interesting papers were read in the Commercial Section from Mr. C. Mahlon Kline and Mr. John H. Thompson on the subject of preserving the druggist's credit. This started an interesting discussion regarding the infrequency with which druggists borrowed money of their bankers in order to discount their bills and to take advantage of other cash opportunities. Mr. Kline mentioned in his paper a case where two men had started in business with about

equal opportunities. One always paid cash for his supplies even though he had to borrow the money sometimes to do it. The other disbelieved in borrowing money and fell into the habit of holding up his creditors. A financial crash came over the country, and the man who had preserved his credit by prompt payments was carried along, while the other fellow was denied supplies.

Harry B. Mason pointed out that very few druggists used their banks as they should. They did not realize that the best way to get along was to make the other fellow's money work for them. Frequently, by borrowing money at 5 per cent, one could make it earn 10 or 12 per cent and thus realize a handsome profit than on drug-store merchandise. Cash discounts alone mean from ten to fifteen per cent a year upon the money involved. Moreover, there are frequent opportunities for making large purchases at low prices, and perhaps also for making investments outside of the store. Ready money is needed, and if it is not available it should be borrowed at the bank. Several other speakers bore out this contention.

COÖPERATIVE CIGAR MANUFACTURE.

Among other papers read before the Commercial Section was one by E. Berger on "The Formation of a Coöperative Cigar Manufacturing Company." He dwelt interestingly upon the profits to be made by such an enterprise. The middleman could be cut out and a saving therefore made of from twenty-five to fifty per cent. Furthermore, a cigar could be sold for five cents which would equal the ordinary ten-cent smoke. Mr. Frank H. Freericks, the leading spirit of the American Druggists' Fire Insurance Company, spoke heartily in favor of Mr. Berger's proposition, and declared that if it were based on quality it ought certainly to succeed.

THE ELECTIONS.

Three sets of nominees were as usual selected for the general offices, the selections to be made in the usual manner by mail later on: For president, Wm. B. Day, Chas. Holzhauer, Wm. Mittelbach; for first vice-president, Jose Alacans, C. M. Ford, Otto F. Claus; second vice-president, R. H. Walker, C. A. Mayo, W. J. Teeters; third vice-president, J. O. Burge, A. H. Clark; for the council, F. C. Godbold, W. C. Alpers, Geo. B. Kaufmann, C. W. Johnson, L. E. Sayre, E. Berger, Theo. G. E. Otto, J. C. Wallace, F. W. Meissner.

H. M. Whelpley was of course re-elected treasurer and C. Louis Diehl reporter on the progress of pharmacy, both officers having their salaries increased from \$750 to \$1000 annually.

The following officers were elected in the various sections and auxiliary bodies:

Section on Practical Pharmacy and Dispensing: P. Henry Utech, chairman; W. A. Hall, secretary; and Leon A. Lascoff, associate.

Section on Commercial Interests: E. Berger, chairman; R. W. Mansauer, secretary; and B. E. Pritchard, Louis Berger, and Frank H. Carter, associates.

Section on Education and Legislation: John C. Wallace, chairman; Wilbur J. Teeters, secretary; and L. D. Havenhill, P. J. Ascher, and H. D. Kniseley, associates.

Section on Scientific Papers: W. O. Richtmann,

chairman; Chas. H. LaWall, secretary; and Frank R. Eldred, associate.

Historical Section: Otto Raubenheimer, chairman; Caswell A. Mayo, secretary; and Edward Kremers, historian.

National Association of Boards of Pharmacy: R. H. Walker, president; D. F. Davis, H. L. Hausmann, and L. C. Lewis, vice-presidents; A. H. Sala, secretary-treasurer; R. H. Walker, J. B. Bond, and C. E. Zinn, executive committee.

American Conference of Pharmaceutical Faculties: J. H. Schlotterbeck, president (re-elected); A. H. Clark, vice-president; C. W. Johnson, secretary-treasurer.

DENVER FOR NEXT YEAR.

There was an interesting situation over the selection of a place for next year's meeting. The members of the Committee on Time and Place, with Charles M. Ford as chairman, were unable to agree, and they recommended that a vote be taken on Denver, Cedar Point,



P. Henry Utech, chairman-elect of the Section on Practical Pharmacy and Dispensing.

Ohio, and Nashville. This was done on the boat going to Plymouth Friday, and it resulted in the selection of Denver by a considerable majority. Mr. Ford was himself eloquent in favor of his own town of Denver, and he caused considerable merriment, when, in responding to the official addresses of welcome at the first general session, he cleverly brought in several references to Denver, although he said he had been forbidden to mention it in his remarks.

THE ENTERTAINMENT.

The entertainment was lavish, and the hospitality bountiful. Merely to give a list of the things done would require much space. There were an alumni banquet and a smoker for the men, and auto trips, card parties, and historical excursions for the women. The *piece de resistance* was the boat trip to Plymouth on Friday, which consumed the entire day. Boston is rich in interest, and the visitors reveled in its varied charms. C. H. Packard, the local secretary, was admirably assisted by the local members and their wives, and the entertainment features were unusually successful.

SOME PHARMACEUTICAL PREPARATIONS.

Precautions to be Considered in the Manufacture of Several Syrups—A Formula for Elixir of Terpin Hydrate, Double Strength—Hints on the Preparation of Infusion of Digitalis, Tincture of Iodine, and Emulsions of Fixed Oils.

By P. HENRY UTECH, Ph.G.,
Meadville, Pa.*

For many years past we have kept a record of hints and suggestions for the improvement or expediency in the manipulation of the various pharmaceutical processes or operations which have come under our observation. I take pleasure in presenting to you at this time some of the data which, in our experience, have given excellent results. It is not claimed that these devices are all original, but were simply obtained from authentic sources, tested, tried, and not found wanting.

A BLUISH COLOR IN SYRUP DUE TO SUGAR.

I shall first call your attention to a few points, simple but very essential, in the making of U. S. P. syrups. We formerly had considerable trouble in making satisfactory syrups, both simple and medicated, until we began using the brand of sugar known as "Crystal A" Confectioner's Sugar. This particular brand seems to be entirely free from the bluish coloring principle. The water, too, must be distilled, not sterilized, if you expect to make a perfect product.

LIGHT DETRIMENTAL.

We also experienced some difficulty in maintaining a satisfactory syrup of wild cherry. Inasmuch as the influence of light exercises a very detrimental influence on the keeping quality and remedial value of this syrup, we have found it quite advantageous to keep the stock syrup in an amber-colored glass container. Some authorities claim that the aromatic principle is entirely dissipated in a few months upon exposure to direct light. Incidentally I might mention that such clinical authorities as Wood, Sollman, Wilcox, and others are convinced that this preparation is used chiefly for a flavor and contains little, if any, therapeutic property.

The compound syrup of hypophosphites formerly gave us some difficulty in making a

permanently clear product owing to the presence of a basic calcium salt. The addition of a small quantity of hypophosphorous acid seemed to remedy the trouble.

ELIXIR OF TERPIN HYDRATE, DOUBLE STRENGTH.

An elixir of terpin hydrate containing twice the usual amount of the terpin hydrate can be prepared by the addition of a small quantity of acetic acid. The formula we now use is as follows:

Terpin hydrate, in powder.....	256 grains.
Acetic acid.....	80 minims.
Tincture of sweet orange peel	2 fluidrachms.
Alcohol.....	8 fluidounces.
Glycerin.....	4 fluidounces.
Elixir aromatic, q. s. to make	16 fluidounces.

Dissolve the terpin hydrate by the aid of a gentle heat in the alcohol, to which the acetic acid has previously been added. Then add the tincture of sweet orange peel, glycerin, and lastly, elixir sufficient to make 16 fluidounces.

Most formulas suggested by other experimenters seem to be heavily charged with glycerin in place of the alcohol, in many instances making the preparation eligible to the class of glycerites. Many also suggest the use of saccharin as a sweetening agent, which has recently been tabooed by the pure food and drug authorities.

We also make the elixir aromatic by using only one-half the quantity of syrup and water called for, in the first part of the operation, mixing with the spirit of orange and alcohol, and filtering until a clear solution is obtained. By this operation there is an economy of several hours' time.

INFUSION OF DIGITALIS.

When dispensing the U. S. P. infusion of digitalis, the physician expects to get a preparation which represents the entire diuretic property of the drug. For this reason we have always employed the well-known English brand of the drug. Although costing more

*Paper read before the Section on Practical Pharmacy and Dispensing of the A. Ph. A. last month in Boston.

than double the price of the American-grown drug, there is no comparison in the quality of the finished preparation.

This idea of economy is of altogether too frequent occurrence among our pharmacists. Many of the newer U. S. P. and N. F. formulas contain numerous volatile or aromatic substances, in some instances as an adjuvant, in others because of some therapeutic value. It is possible that often their object is entirely defeated through the dispensing of an inferior product. Take the case of the liquor antisepticus, tincture of lavender compound, etc., as examples. Their medical properties depend entirely upon the volatile oils. Many of our more progressive wholesale drug firms now attach a label showing the physical constants of each oil, thereby insuring uniformity and accuracy in the finished preparations in which they are employed.

We prepare several aromatic medicated waters by simple agitation of the oil with hot water, allowing the fluid to stand for several days or weeks as the case may be. The product is then poured upon a wet filter which retains the excess of oil, and the preparation is then ready for use.

TINCTURE OF IODINE.

For more than ten years we have used the circulatory displacement method in preparing tincture of iodine with most happy results. The U. S. P. 1890 formula calls for potassium iodide in addition, which is not immediately dissolved. We use about 90 per cent of the alcohol at first, place the mixed chemicals in a muslin bag and suspend them for one-half hour in the liquid. After that we take any excess of potassium salt out of the bag, add it to the tincture thus prepared, and finally wash the bag with the remainder of the alcohol.

CASTILE SOAP FOR EMULSIFICATION.

In making up emulsions of fixed oils, such as castor, almond, cottonseed, etc., the addition of powdered Castile soap—about 1 gramme to each 30 Cc. of oil—makes a most excellent emulsifying agent. In the case of castor oil emulsion, the soap likewise increases the aperient action of the oil. The soap may also be used in preparing emulsions of balsam of copaiba by increasing the amount with very satisfactory results. Emulsions of this character, however, are not as permanent as those made with gum arabic.

A NOTE ON CAPSICUMS.*

By WILBUR L. SCOVILLE.

For many years pharmacists have appreciated the fact that different varieties of ginger vary in pungency and flavor, but that capsicums vary in the same way and to a much greater extent seems to have escaped attention.

The pungent principle of capsicum is capsaicin, a crystalline body which E. K. Nelson says¹ is so hot that one drop of a solution 1 in 1,000,000—or less than one millionth of a grain—will make itself known to the tongue. He found one variety of capsicum to contain 0.14 per cent of this principle.

H. C. Irish, in a "Revision of the Genus Capsicum,"² describes 42 garden varieties and quotes authorities for the statement that the

different varieties readily degenerate or change under cultivation or the lack of it. Hence the pungency of capsicum varies not only with the species, but with variations in growth or cultivation. Paprika, one of the mildest forms, has been grown quite free from capsicum—in short, it is non-peppery pepper.

And while tabasco by another name might be quite as hot, yet the tabasco species may not always come up to its reputation!

In other words, the pharmacist cannot, by specifying a certain species of capsicum, be sure thereby of securing the most active medicinally. The best method of selection appears to be the physiological test, which will be referred to again below.

In commerce the greater demand for capsicum is as a condiment, and for the preparation of sauces, pickles, etc. In these a full, rich flavor is desired, as well as pungency.

*Read at the Boston meeting of the American Pharmaceutical Association last month.

¹*Journal Ind. and Eng. Chem.*, 1910, p. 419.

²*Report Mo. Bot. Gardens*, 1898, p. 53.

Supplies for such purposes are marketed as "Japan Chillies," "Zanzibar Chillies," and "Mombassa Chillies." Doubtless there are other brands, but these appear to be the leading ones. A limited number of tests of these three brands show that Japan Chillies have a rich and full flavor, but are not very pungent, as compared to the others. They command a higher price, and make a superior condiment. Zanzibar Chillies came next in pungency and flavor, while Mombassa Chillies are the most pungent and the poorest in flavor.

Physiological tests are tabooed in some quarters, yet when the tongue is sensitive to less than a millionth of a grain it certainly has an advantage over the analytical balance, which has a sensitiveness far below that; and since it is not necessary to compare different capsicums in terms of percentage of capsicum, when a direct ratio of drug to drug expresses all that is needed, the physiological test offers here a ready and satisfactory means of selecting capsicum.

The method I have used is as follows: One grain of ground capsicum is macerated over night in 100 Cc. of alcohol, and after thorough shaking, filtered. This alcoholic solution is then added to sweetened water in definite proportions until a distinct but weak pungency is perceptible on the tongue.

By this method, Japan Chillies tested 1 in 20,000 to 1 in 30,000, Zanzibar Chillies 1 in 40,000 and 1 in 45,000 (two lots), and Mombassa Chillies 1 in 50,000 to 1 in 100,000. From a limited number of tests the Mombassa brand appears to be decidedly stronger in capsicum. We have not had it under observation long enough to decide on a limit of acceptability that will represent the average of the drug, but there appears to be no trouble in obtaining it of a strength of 1 in 50,000 or above.

Oleoresin of capsicum may test 1 in 150,000 and upwards. When used as a rubefacient, flavor is of no consequence, but a high capsicum content is desirable.

It may be of interest to state that commercial capsicums vary also in fat-content and color to a marked degree. Oleoresins were examined which contained as little as 5 per cent of fat insoluble in alcohol, while others contained above 50 per cent, yet the more pungent oleoresins (based on the entire mixture) were those containing considerable fat. The fat in some instances was a marked green, quite free from red; in others it was orange, and in still others a deep red, and no relation of color or fat to pungency could be observed.

Laboratory of Parke, Davis & Co., Detroit.

PHARMACEUTICAL WINDOW DISPLAYS.

Not so Difficult as One May Imagine—Several Ideas for Such Trims—Manufacturing Processes that Will Interest the Public—Utensils, Medicinal Plants, and Crude Drugs Available for Exhibition—The Returns from Windows of a Purely Technical Nature.

**By OTTO RAUBENHEIMER,
Brooklyn, N. Y.***

For the pharmacist, who is somewhat ingenious and practical, there are several ways of making window displays of a strictly pharmaceutical character. The various pharmaceutical processes can be utilized:

SEVERAL PROCESSES.

Filtration.—This simple process can be made quite an attraction if carried on in the show window. Water colored blue with a

little ultramarine can be filtered clear and is a strange phenomenon to the average public. And still more so is the coloration of water tinted with an aniline dye and filtered through kaolin.

Continuous filtration, or one lasting quite a long time, can be easily arranged by an inverted large bottle, *e. g.*, a five-gallon bottle over a large filter. To prevent any splashing the bottle should be fitted with a stopper and one or two pieces of glass tubing.

Percolation, especially if a bottle containing

*Read before the Section on Commercial Interests of the A. Ph. A. last month in Boston.

the colorless menstruum is inverted over the percolator, has proved quite an attraction in my window. The highly colored percolate, dropping at regular intervals, arouses the curiosity of the public.

Distillation.—The process carried on in the show window will give that pharmacy a professional and scientific look. A Remington still can be used for the distillation of water and also for the recovery of alcohol from the marc left after percolation. If a glass retort is used, the difference between the colored liquid to be distilled and the colorless distillate will be a mystery to the average public.

I have found an upright or reflex condenser attached to a large flask quite an attraction. This method of distillation has the great advantage of taking care of itself without any constant watching.

Precipitation.—This process can be utilized in the manufacture of milk of magnesia by filtering the solution of magnesium sulphate into the solution of sodium hydroxide contained in a large and tall bottle. The magnesium solution being heavier in gravity sinks to the bottom, forming magnesium hydroxide on its way.

Washing, decanting and siphoning can be demonstrated in the manufacture of the same preparation.

GLASSWARE AND APPARATUS AVAILABLE.

Laboratory ware displayed in the show window is one of the best attractions. The variety is so large that there is no trouble in making a selection. I mention the following: Funnels and percolators displayed on stands, percolator jars, tincture press, drug mill and sieves, water-bath and evaporating dishes of glass and porcelain, precipitating jar, stirring rods, etc.

Chemical glassware makes a still more scientific display, a display which gives the public the impression that this pharmacist belongs to a higher class. The following can be displayed to great advantage: Retorts, condenser and receiver, different styles of flasks, including volumetric flasks, pipettes and burettes with stand, wash bottle, drying jar, beakers, test tubes on the rack, hydrometers in jar, specific gravity bottle, and even the blowpipe.

Prescription utensils constitute a very appropriate window display which will impress the laity and also the medical profession, and

which will thus help to increase the prescription business. The following might be displayed: Different sizes of mortars and pestles of Wedgwood, porcelain, and glass, graduates holding from minims to a quart, even a prescription balance, pill machine, porcelain tile, tablet and tablet triturate machines, suppository machine and molds, infusion jar, spatulas, an assortment of pill and powder boxes, different sizes of ointment and other jars, and a row of prescription bottles, holding from one drachm up to a pint or a quart.

LITERATURE ON DISPLAY.

Prescription books and files, especially if you have an old-established pharmacy, always make an interesting window display. At the same time a sign may state the number of prescriptions compounded during a month or year or during the entire existence of the store.

While on the subject of books I will also mention a literary display, for example, some of the pharmaceutical journals which I read, or some of the books on pharmacy, chemistry, botany, materia medica, etc., in my library; or some of the Pharmacopœias and Formularies I am acquainted with.

Such a display, especially if it includes some foreign journals and books, will undoubtedly raise you in the opinion of the public above the level of the ordinary druggist. Along the same line it is well to occasionally make a window display of your college diplomas, your licenses, and your certificates of membership in different pharmaceutical associations. An odd display of that sort will interest the public and will benefit your business without any doubt.

MEDICINAL PLANTS.

One of the most interesting displays is one of living plants in the show window. It is not necessary to be an expert botanist to go out in the fields, or even in the city limits, to gather a great many medicinal plants. The writer has done so on numerous occasions. I mention the display of digitalis in bloom, together with historical facts, from its introduction into medicine as a diuretic by the English physician, leading up to the discovery of its glucosides and the application of biological standardization.

A blooming larkspur plant, *Delphinium Consolida*, with its blue dolphin-shaped flow-

ers, whence its name, has proved quite an attraction. Furthermore it has greatly helped the sale of tincture of larkspur.

Conium, the poison or spotted hemlock, with a bit of its history as being used by the old Greeks to execute their criminals, and as being the plant from which the drink was prepared to poison Socrates, has proved an interesting window display. A jar of poisonous conium seed next to a jar of harmless anise seed, together with a proper explanation of the danger of confusion, will have the beneficial effect that the laity will patronize the educated pharmacist in whom they have confidence.

CRUDE DRUGS.

Drug Display.—Above all a druggist or pharmacist should occasionally make a display of drugs, including drugs in their crude state, in his show windows. Flowers, herbs, barks, roots, seeds, etc., displayed in boxes and jars, of course properly labeled, make an interesting as well as an educational window display. If neatly written or printed signs with further explanation and a bit of history accompany this display, it will arouse still more attention.

I might also call your attention to the fact that at least one pharmaceutical manufacturing house in connection with its assayed preparations has placed in the hands of the pharmacists a set of drugs in glass-stoppered bottles with neat celluloid labels giving synonyms, definition, habitat, history, etc.

Besides these the pharmacist should make window displays of vanilla beans in jars, or rhubarb in the root or in fingers, cubes, and powder, of boxes of chamomile flowers, of tins of insect powder, or bars and pieces of Castile soap, sticks of extract of licorice. During the Hudson-Fulton celebration in New York City (August 25 to October 3, 1909) I made a cinchona window display, which was also exhibited at the October pharmaceutical meeting of the Philadelphia College of Pharmacy. This pharmaceutical window display is described in the *American Journal of Pharmacy* of November, 1909, pp. 534-536, and was even abstracted in the *Mittheilungen zur Geschichte der Medizin und der Naturwissenschaften*, Bd. ix, Heft 3, p. 325, published by Leopold Voss, Hamburg. I could continue to enumerate displays of chemicals, indicating that you keep a full stock of same, of various preparations, of specialties and of seasonable

articles, but too much time has already been occupied.

CHEMICALS OF HISTORICAL INTEREST.

Before closing, however, I want to call your attention to two facts, namely:

1. *Historical knowledge*, as to the origin of drugs, the etymology of their names and their history, is of great benefit in the practice of pharmacy and also in pharmaceutical window displays. Such a simple display as sulphur, Rochelle salt, and cream of tartar lozenges can be made highly interesting and educational by displaying at the same time jars of these chemicals together with placards of their history.

THE RETURNS.

2. *Dollars and Cents in Window Displays.*—From a pecuniary standpoint these displays should also be profitable. In this age of commercialism even the pharmaceutical window displays have to produce hard cash. That such can be done I have fully demonstrated to my own satisfaction. The display just mentioned of sulphur, Rochelle salt, and cream of tartar lozenges greatly interested the laity, who willingly and rapidly bought these at 10 cents per box, while my nearest competitor offered sulphur and cream of tartar lozenges at 5 cents a box.

Through the display of chemical glassware the students of the high school bought their flasks, glass and rubber tubing, and also chemicals at my store, and also remembered me when their families were in need of any drugs, prescriptions, etc.

The display of the flowering larkspur plant, together with jars of the whole and ground seed and the finished tincture, has greatly helped the sale of the drug as well as the preparation. A neat show-card in your window announcing that you keep a complete line of chemicals and reagents will bring to your store students, amateur and professional photographers, and physicians for their supplies and other goods.

The subject of window displays is most certainly an important one. In fact, one of our bright pharmaceutical editors has even written a book on "Window Displays for Druggists," of which two editions have so far been published.

I trust that my suggestions for pharmaceutical window displays will be somewhat con-

sidered and will have the desired effect, namely, that more displays will be made pertaining to pharmacy, displays that will gain the con-

fidence of the public and the physicians, displays that will be a credit to the profession of pharmacy.

A NEW METHOD OF MAKING TINCTURE OF OPIUM.

A Process Based Entirely on Maceration—Has Several Advantages Over the Old Way—Exhausts the Drug while Saving Time and Menstruum.

**By WILLIAM R. WHITE,
Nashville, Tenn.***

Tincture of opium, which is undoubtedly the most important preparation in the Pharmacopœia, has been the subject of much study and investigation. Many methods have been devised for its manufacture, the majority of which have involved both the principle of maceration and percolation. The chief feature of this method, however, is that it is based entirely on the principle of maceration. There are three points in which the writer claims it has an advantage over the U. S. P. method:

1. It entirely exhausts the opium.
2. It avoids the slow process of percolation.
3. It recovers a part of the menstruum left in the mass.

The process is as follows:

Take 100 grammes of U. S. P. granulated opium and add to it 500 Cc. of boiling water, macerate for forty-eight hours with occasional stirring, add 500 Cc. of alcohol, macerate again for forty-eight hours with occasional agitation, allow the drug to precipitate, decant the clear supernatant liquid, place the residue on a filter and allow the menstruum to filter until it ceases to drop, then place the filter and contents in a tincture press and express as much as possible, add the filtrate to that portion decanted, measure the whole, noting the difference between that obtained and the 1000 Cc. first used. The marc is then exhausted with hot water by adding about 80 Cc. at a time, allowing it to macerate a few hours, then expressing it. This operation is repeated until the opium is exhausted, which can be ascertained by testing the filtrate with the general alkaloidal reagents. The combined ex-

tractions are then evaporated on a water-bath until the volume is equal to one-half the difference noted above. This is then mixed with an equal volume of alcohol and added to the measured filtrates. The whole tincture is then filtered, and is ready for use.

If a press is not available, the same results can be obtained in the exhaustion of the drug with the hot water by repeatedly macerating and filtering instead of expressing, except that all of the alcohol left in the marc will be lost by the subsequent evaporation.

About 400 Cc. of hot water has usually been found sufficient to complete the exhaustion. Some samples of opium, however, seem harder than others to exhaust. The principal objection to this method is the time that is required in evaporation. This is to a large extent under the control of the operator and can be hastened when desired by using a greater number of evaporating dishes or by evaporating *in vacuo*.

There seems to be no longer any dispute over the question whether water will exhaust opium of its morphine, since the U. S. P. has relied upon this fact in its directions for making the deodorized tincture opium, also in the extraction of the opium in assay process.

In 1902, Dr. E. A. Ruddiman published an article in the BULLETIN OF PHARMACY, vol. xvi, p. 368, in which he claimed that the opium was not entirely exhausted by the dilute alcohol used in the 1890 U. S. P. process.

In 1906, H. A. B. Dunning, in a paper read before the A. Ph. A., stated that it had been proved by assay that neither the old nor the new U. S. P. method for making tincture of opium exhausts the opium completely. After repeatedly assaying the tincture made by the

*Read before the Section of Practical Pharmacy and Dispensing of the A. Ph. A. at the Boston meeting in August.

above method, I can state that my results have proved conclusively that this method does completely exhaust the opium of its morphine.

The saving in alcohol by using this method is quite an item in the cost of the tincture, especially where large quantities are made at a time.

In conclusion, I will state that this method has been in constant use by one firm for fifteen years with the most favorable results, and it is my firm belief that the practicability of this method will appeal especially to those pharmacists who are not prepared to assay their finished tincture.

U. S. P. ADMISSIONS AND DELETIONS.

The Executive Committee of Revision has Decided what Old Articles to Drop and what New Ones to Admit—Both Lists are Here Printed for the Information of BULLETIN Readers.

[NOTE BY THE EDITOR.—For over a year now the Sub-committee on Scope of the General Committee of Revision has been discussing what drugs, preparations, and substances shall be represented in the forthcoming ninth revision of the U. S. P. Decision has now been reached on all but a few articles, and the lists of admissions and deletions were made public by Chairman Remington at the Boston meeting of the A. Ph. A. last month. These two lists have had the approval of the members of the Executive Committee of Revision, and everything is now in readiness to go ahead with the actual work of revising the texts for the articles decided upon for recognition.]

NEW ARTICLES FOR ADMISSION.

Ammonium Bifluoride.
Antitetanic Serum.
Apiol.
Aspidospermine.
Bismuth Beta-Naphthol.
Buchu (Long).
Caffeine Sodio-Benzozate.
Calcium Chloride (Hydrated Crystals).
Calcium Glycerophosphate.
Calcium Lactate.
Carbonic Acid (Compressed).
Condurango.
Creosote Carbonate.
Crocus.
Diacetyl-Morphine.
Diacetyl-Morphine Hydrochloride.
Diastase.
Emplastrum Cantharidis.
Erythrol Tetrinitrate.
Fluorescein.

Hydrastine Hydrochloride.
Mercury Salicylate.
Milk of Magnesia.
Milk of Bismuth.
Oxygen (Compressed).
Picric Acid.
Phenolphthalein.
Pine Needle Oil.
Potassa Sulphurate.
Quinine and Urea Hydrochloride.
Saccharin Sodium Salt.
Sodium Cacodylate.
Sodium Glycerophosphate.
Sodium Perborate.
Solution of Hydrogen Dioxide (30 per cent).
Theobromine Sodio-Salicylate.
Trioxymethylene.
Uranium Nitrate.
Vaccine Virus.

Fluidextractum Conii.
Fluidextractum Cubebæ.
Fluidextractum Cyripedium.
Fluidextractum Digitalis.
Fluidextractum Euonymi.
Fluidextractum Eupatorii.
Fluidextractum Geranii.
Fluidextractum Lappæ.
Fluidextractum Leptandrar.
Fluidextractum Lupulini.
Fluidextractum Matico.
Fluidextractum Mezerei.
Fluidextractum Pareire.
Fluidextractum Phytolacæ.
Fluidextractum Quassia.
Fluidextractum Quercus.
Fluidextractum Quillajæ.
Fluidextractum Rosæ.
Fluidextractum Rubi.
Fluidextractum Sabinæ.
Fluidextractum Sanguinaria.
Fluidextractum Scopolæ.
Fluidextractum Scutellariæ.
Fluidextractum Stillingiæ.
Fluidextractum Stramonii.
Fluidextractum Veratri.
Geranium.
Glyceritum Ferri, Quininae et Strychninae Phosphatum.
Hamamelidis Cortex.
Hedecoma.
Hyoscyaminae Sulphas.
Infusum Pruni Virginiana.
Iodolum.
Lappa.
Lithii Benzoas.
Lithii Salicylas.
Mangani Sulphas.
Mastiche.
Matico.
Mistura Ferri Composita.
Mistura Rhei et Sodæ.
Mucilago Ulmi.
Naphthalenum.
Oleatum Quininae.
Oleo-resina Lupulini.
Oleum Adipis.
Oleum Aethereum.
Oleum Chenopodii.
Oleum Copaibæ.
Oleum Erigerontis.
Oleum Sabinæ.
Pilulæ Aloes et Mastiches.
Pilulæ Aloes et Myrrhæ.
Pilulæ Laxative Compositæ.
Pilulæ Podophylli, Belladonnae et Capsici.

Pilulæ Opii.
Piperina.
Plumbi Iodidum.
Plumbi Nitræ.
Potassii Sulphas.
Prunum.
Pulvis Morphinae Compositus.
Quercus.
Quillaja.
Rubus.
Sabina.
Santonica.
Scammonium.
Scoparius.
Scutellaria.
Sodii Bisulphus.
Sodii Nitræ.
Sodii Pyrophosphas.
Spiritus Aetheris Compositus.
Sulphuris Iodidum.
Syrupus Ferri, Quininae et Strychninae Phosphatum.
Syrupus Hypophosphitum Compositus.
Syrupus Krameria.
Syrupus Rubi.
Tamarindus.
Tinctura Aloes et Myrrhæ.
Tinctura Cardamomi.
Tinctura Gallæ.
Tinctura Ipecacuanhæ et Opii.
Tinctura Horbarum Recentium.
Trochisci Gambir.
Trochisci Glycyrrhizæ et Opii.
Trochisci Krameria.
Trochisci Santonini.
Unguentum Gallæ.
Unguentum Hydrargyri Oxidi Rubri.
Unguentum Potassii Iodidi.
Unguentum Veratrinae.
Unguentum Zinci Stearatis.
Viburnum Opulus.
Vinum Album.
Vinum Cocæ.
Vinum Colchici Seminis.
Vinum Ergotæ.
Vinum Ferri.
Vinum Ferri Amarum.
Vinum Ipecacuanhæ.
Vinum Opii.
Vinum Rubrum.
Zea.
Zinci Bromidum.
Zinci Iodidum.

There are thirty-eight articles still under consideration for admission.

ARTICLES DROPPED FROM THE PHARMACOPOEIA.

Acetum Opii.
Acidum Camphoricum.
Acidum Sulphurosum.
Alumini Sulphas.
Argenti Nitræ Mitigatus.
Bismuthi Citras.
Bismuthi et Ammonii Citras.
Calamus.
Cassia Fistula.
Cataplasma Kaolini.
Ceratum Camphoræ.
Ceratum Plumbi Subacetatis.
Ceri Oxalas.
Chimaphila.
Chirata.
Cinnaldehydum.
Colchici Cormus.
Collodium Stypticum.
Confectio Sennæ.
Conium.
Cusso.
Cyripedium.
Emplastrum Hydrargyri.
Emplastrum Opii.

Emplastrum Saponis.
Emulsum Chloroformi.
Emulsum Olei Morrhua cum Hypophosphitibus.
Extractum Colchici Cormi.
Extractum Digitalis.
Extractum Hamatoxyli.
Extractum Krameria.
Extractum Leptandrar.
Extractum Malti.
Extractum Scopolæ.
Extractum Sumbul.
Ferri Citras.
Ferri et Ammonii Sulphas.
Ferri et Ammonii Tartaras.
Ferri et Potassii Tartaras.
Ferri et Strychninae Citras.
Ferri Hydroxidum.
Ferri Hypophosphis.
Ficus.
Fluidextractum Calami.
Fluidextractum Calumbæ.
Fluidextractum Chimaphilæ.
Fluidextractum Chiratae.

THE IMPORTANCE OF DISCOUNTING BILLS.

Five Druggists Express Their Views and Relate Their Experiences—All Agree that the Practice Pays Handsomely—Some Prove it Arithmetically.

Notwithstanding the movement agitated in the pharmaceutical conventions and journals to make the practice of discounting bills universal in the drug business, there are still a large percentage of proprietors who fail to avail themselves of cash discounts. In this symposium several druggists who have been wise enough to see the advantages of the system and profit by it have come forth with the figures that prove the wisdom of their action. The savings which they have been able to effect are very conclusive object-lessons in themselves.—THE EDITORS.

EDGAR F. HEFFNER,

Lock Haven, Pa.

One cent out of every dollar rung up on our cash register during 1910 was added to our profits because we discounted our bills.

In the ten years our firm has existed we have doubled our stock and our yearly business. This expansion combined with heavy



Edgar F. Heffner.

purchases a number of times put us up against the proposition of having bills come due without the money to pay them, and take the discount.

DISCOUNTING BILLS WITH BORROWED MONEY.

As we started with a strong determination to discount all bills we felt no hesitancy about going to the banks for accommodation, and a simple explanation as to the reason why was all that was necessary to secure the desired loans without hunting for an indorser.

Our books show that the interest on these temporary loans amounted to \$92.50, and also that our discounts during this ten-year period amounted to \$2646.26.

Our bills subject to discount for 1910 amounted to \$15,126.54, and the discounts to \$301.26, or approximately 2 per cent. The rate of discount generally varies from $\frac{1}{2}$ per cent for heavy chemicals, etc., 1 to 2 per cent in ten days from the jobbers, to 5 per cent for specialties and sundries in which the manufacturer's margin of profit is greater. But in any well-balanced business cash discounts will average about 2 per cent in ten days with thirty days net.

A deduction of 2 per cent from a bill for anticipating payment twenty days really figures about 38 per cent yearly interest on the money, so that any solvent business can afford to borrow the money needed temporarily at 6 per cent rather than lose the discounts.

BETTERS THE MORALE OF A STORE.

Meeting financial obligations promptly and taking advantage of every cash discount is in addition the best evidence any individual or firm can give as to the successful management of his or their business.

It has been quite a surprise to find that many firms who are financially able to discount their bills do not do it. Investigation of credit men has shown that druggists are more careless about taking their discounts than are other merchants.

That this has not disabused the minds of the general public as to the immense profits in the drug business is a source of wonder, as "the man who discounts his bills" is rightly considered to be the one who is making and keeping a good profitable business.

A reputation for being slow or poor pay will endanger the success of any business for the reason that the slow one is passed up by the manufacturer or jobber when any good

propositions are put out. He is made to pay the highest price and is naturally the prey of the sharks with doubtful ventures who would hesitate to tackle a wide-awake merchant.

Beside that, the slow-pay merchant cannot hold the confidence of the general public, who soon learn his credit rating. They reason that he doesn't pay his bills because he doesn't do enough business, and it is a well-demonstrated fact that every one likes to buy from a successful, prosperous, going concern.

Finally the subconscious effect of regularly discounting one's bills will be to stiffen his backbone, raise his self-esteem, and make him a better, more methodical business man.

E. E. CALKINS,

Ann Arbor, Mich.

I discount practically all my bills. The rate is from 1 per cent on drug jobbers' invoices to 5 per cent on a few items. It averages probably between 1 and 2 per cent.

I keep no discount account, merely charging to the merchandise account the net amount of my remittance.

The discount amounts to so much more than interest that a druggist can make a good profit on borrowed money in discounting his bills. He can borrow at 6 per cent and save 18 per cent on a thirty-day 1-per-cent invoice. He has ten days to take his discount, which therefore amounts to 1 per cent for twenty days, or 18 per cent per year. He can borrow at 6 per cent on short-time notes, making a profit of 200 per cent on the interest he pays.

What I cannot understand is why some firms refuse to take local checks, either on discounted bills or mature ones, but will wait an extra thirty days and then make draft and pay the exchange themselves.

CLARENCE O. BIGELOW,

New York.

We discount about 75 per cent of our bills, the other 25 per cent being net thirty days, and not subject to discount.

Our cash discounts on different lines are as follows: On drugs and chemicals we get 1 per cent off in ten days; on proprietaries from 1 to 5 per cent in ten days; on sundries, purchased from jobbers, 1 per cent in ten days; on sundries, purchased direct, 2 to 5 per cent in ten days.

The annual saving effected in this way is considerable. Our cash discounts approximate about two-thirds of our office expenses, and we employ two bookkeepers.

It is worth while for a druggist to avail himself of all cash discounts even if he has to borrow the money and pay interest on it. But why borrow the money? The bank's help may be necessary at the outset, but when profits are reinvested in the business, borrowing for discount purposes should cease, except



Clarence O. Bigelow.

upon rare occasions. This, of course, applies only to those lines of merchandise where monthly purchases vary little throughout the year, and not to those branches of trade having their busy seasons, when extraordinary purchases are necessary.

By husbanding his resources a pharmacist should soon have ample capital with which to do business, and thereby enable him to make purchases in larger quantities, discount bills, and promptly meet every ordinary business obligation.

GRANT W. STEVENS,

Detroit, Mich.

I discount all bills that carry any cash discounts, even the Standard Oil Co.'s, which are only one-half of one per cent.

I pay all city bills on the 10th of each month, excepting the wholesale drug houses, to whom I remit on the 5th and 20th respectively.

Upon about 10 per cent of our purchases there is no discount as such: the goods are candies, chewing gums, sundries, etc., which are bought from pedlers for spot cash.

Upon about 35 per cent of our purchases there is a 1-per-cent cash discount, which ap-



Grant W. Stevens.

plies to purchases of drugs from the wholesale houses and a few of the manufacturers.

Upon about 50 per cent of our transactions there is a 2-per-cent cash discount, which applies to pharmaceuticals, sundries, cigars, and similar things.

Upon 5 per cent of our purchases there is from 3- to 5-per-cent cash discount. This applies to wines, liquors, etc.

In 1910 our discounts amounted to approximately \$186, irrespective of our saving in trade discounts for quantity and job-lot purchases.

I have never availed myself of the opportunities to be gained by the use of borrowed capital, but highly appreciate the value of such accommodations if they are used conservatively.

C. H. McCONNELL,

President Economical Drug Co., Chicago, Illinois.

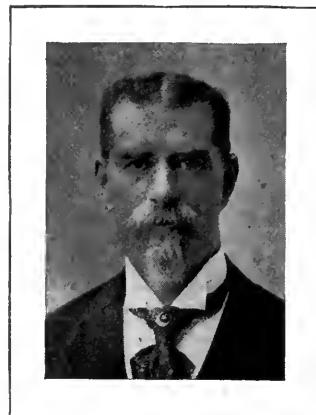
We discount all our bills. We even pay in ten days bills that are not due until thirty days, without discount. This we do for the purpose of strengthening our credit, if it needs strengthening, which we doubt; but we hate to have unpaid bills on our files.

It is difficult to say how much, expressed in percentages, we save by discounting. Cash discounts range from 1 and 2 to 5 per cent. At a rough guess they average $2\frac{1}{2}$ per cent. This, on the \$206,703 worth of goods we bought last year, would amount to something over \$5000, and would pay the salaries of five clerks at \$1000 a year.

As for the amount of money we save by taking advantage of cash discounts, we are scarcely able to say for want of records. We eliminate red tape as far as possible in keeping statistics of our business, and it is of no interest to us to know what kind of goods we are selling. We simply have two headings—prescriptions for one, and all the rest for the other.

I know of drug stores not doing one-half the business of the Economical that give employment to two, three, or even four men in their accounting department to figure out percentages of sales in every conceivable way. We asked them what good it would do to know how much or how little they sold of various patent medicines, and they had to admit it would do no actual good, but that they "kind of wanted to know."

The office work of this vast business is done



Chas. H. McConnell.

by myself, in a supervisory way, which is as little as I possibly can get along with, and by Mr. Naylor, secretary and treasurer, who runs the cash, bank accounts, bookkeeping, and is stenographer, with the help of an assistant four or five hours a day figuring up bills. He could not attend to so much if I did not eliminate red tape in dictation. My letters are short and to the point, and don't keep him one-half hour a day, on the average.

THE DRUGGIST AS A BUYER.

A Paper of Great Practical Usefulness by One of the Largest Retail Buyers in the West,
the Senior Partner of a Drug Firm Operating Eight or Nine Stores.

By CHAS. R. SHERMAN,*
President of the Sherman-McConnell Drug Co., Omaha, Neb.

The buying of goods involves, first of all, a knowledge of what may be *sold* with advantage. This advantage may be a short or a long profit, and the returns may be computable in either dollars or customers.

FOUR POINTS.

The whole subject may be classified somewhat under the headings of:

1. What to buy.
2. When to buy.
3. Where to buy.
4. How much to buy.

Each of these propositions, however, is dependent, in a measure, upon one or all of the others.

"What to buy," for the man in the large city store, may be something entirely different from the article required by the dealer in the smaller town. Here the knowledge of the buyer and the seller must be combined.

PARIS GREEN AS AN EXAMPLE.

It is springtime and the manufacturers and dealers are sending out notices regarding the subject of "Paris Green." Ninety-nine per cent of all that is sold of this article in drug stores is disposed of during the space of one calendar month, and here indeed, in this one item, is a subject not meaning much in dollars and cents, yet involving a careful knowledge of the rules of buying and selling with the element of chance or "trade wind" thrown in.

A certain dealer may be located in a place where the nearest hill of potatoes is 50 or 100 miles distant, and the subject is therefore of absolutely no interest at all.

Another one is an agricultural country where "Murphies" are raised in abundance, but he has never noticed much demand for Paris green, or, indeed, for any other insecticides. This fellow has been asleep and has let the business drift into other channels.

*Read before the Nebraska State Pharmaceutical Association and specially contributed to the BULLETIN OF PHARMACY.

The live dealer and the careful, competent, and courageous buyer will carefully estimate his probable demand for Paris green and get the best possible price for it. If it is a good year for this article, he has the satisfaction of being able to supply all demands at best current prices, and reaping the profit that belongs to the business.

If, however, he has been improvident in looking after this item until the season is well upon him, he will probably miss a large part of the business and will greatly annoy his prospective customers by not being in position to supply the article when wanted. If supplies are obtained from a distant market, it will be too late and the other fellow will have had the business.

A too niggardly policy in estimating one's wants will bring about the same results. Of course, a "bad year," which on this item means a year in which Paris green is not needed by potato raisers, will leave the plentiful buyer with some stock to carry over till the next year, but since Paris green is a staple product, this is only one of the trade hazards that should be bravely faced by a druggist who wishes to be really in the game.

ANTICIPATING DEMAND FOR SEASONABLE GOODS.

Each month and week in the year brings its procession of items that have a more or less active interest to the buyer and seller for a long or short season only.

Moth balls and moth-proof bags, fly-paper, root beer, ginger ale, mineral water, not forgetting our old friend sassafras—each has its season when it may be termed the central figure in the little drama of commerce being enacted in every drug store.

To remember these facts is of primary importance to the buyer in guiding him toward proper, timely and adequate purchases.

The pop-corn, peanut and red lemonade stands would be melancholy spectacles on the

day after the circus, but in the midst of the "greatest show on earth," with its throng of interested pleasure seekers, each one of these venders is a merchant of the most approved type, but each is wise enough to move on with the show, and experience has taught him to stock up *the day before* the performance.

It will be seen that the foregoing remarks relate to both the subjects of "What to buy" and "When to buy," for one of these subjects cannot be separated from the other.

"Where to buy" and "How much to buy" are equally inseparable subjects. It is absurd for any one to lay down an absolute rule for the guidance of all dealers, as the varying conditions of each establishment, large or small, must be the factors to guide and control this matter wisely.

LEARN A LESSON FROM THE POP-CORN MAN!

We can learn much from the pop-corn and peanut men, who carefully make their purchases in *advance*, prepare their wares for rapid sale, and in most instances really seem anxious to sell something that will please the patron.

The pop-corn business has perhaps no rival except that of the peanut vender, as an ideal commercial project. Here the bugbears of "dead" stock, "out-of-date" stock, "large" or "small" sizes, and "seasonable demand," are all reduced to a minimum. It is only a question of getting *plenty of buyers for pop-corn and peanuts*. For this reason, in order to make the business an attractive one, the atmosphere of the circus and the busy street corner, with their throngs, is absolutely necessary.

Unfortunately the dealer in staple lines must figure on an entirely different basis than do the itinerants we have mentioned. The problem of buying therefore becomes much more complex and requires the greatest nicety of actual knowledge, as to just the articles needed and how much of each—and this of course involves the important question of the source of supply.

One may hear, through the channels of gossip in the trade, a great deal about "good buyers," "sharp buyers," "close buyers," "reckless buyers," and "inside buyers," but the whole subject of successful buying, like any other connected with business, must be largely dependent upon a *knowledge of what is*

wanted, and the requisite *care* to see that one gets it.

AS TO WANT-BOOKS.

The buyer must, in some manner, carefully collect data for reference. Possibly the first record needed is that showing *what* is wanted. This is represented by the general "want-book," which of course means any kind of a book or slip where may be written the name of the article needed. The time to find out when this article is needed has been hinted at already, but inevitably the moment comes when the customer asks for the article you *do not have* in stock, and then is the moment when this article must imperatively be put down in your want-book. An indexed want-book with special pages for firms of whom frequent purchases are made is the best way not to overlook items needed of regular stock. The article asked for that you do not have in stock may be so *new* or so *rare* or so *obsolete* as to not justify carrying it, but this consideration must be carefully weighed with reference to each item, for here are the *nascent atoms that make the molecules that make the mass that makes your business*.

Disregard the individual demand of the customer of the hour and you have blighted the germ of business growth! The buyer in most establishments is the one in position to nurture this germ, and perhaps develop from the smallest beginning a tree that will furnish fruit and shade in times of commercial hunger and drought.

DON'T IGNORE THE SINGLE CALLS FOR NEW THINGS!

There is no more interesting phase of business than that of watching the growth in sale of a single item originally stocked from a single call. At the present moment I recall two articles, one of them a rheumatism remedy, the other a cleaner for clothes, one selling for 75 cents and the other for 25 cents, one manufactured in one of the busy towns of a seaboard, trust-ridden commonwealth, the other in the commercial and esthetic hub of the Bay State and the universe, where all preparations for taking out spots, literal and figurative, should probably be made.

The almost sporadic call for the rheumatism remedy, by receiving requisite attention to the end that the article should be supplied to the prospective customer, was the beginning

of quite a flourishing business on this one item." The same result obtained in the case of the clothes cleaner. One of these articles is now purchased in 1-gross, and the other as high as 5-gross, quantities. The original purchase of each item was *one bottle* only, sent direct from the manufacturers to ourselves, because we could not obtain it through any western jobber. In the instance of the first purchase of each of these articles, it was necessary to ask the customer to bear a portion of the expense of obtaining the items in addition to the value of the goods.

It should also be stated that the *growth* in sale of these items has been produced from causes *outside* of our store, not from within; therefore showing that these transactions were profitable once to our house as new business and new customers were attracted that probably would not have been obtained without the presence of these items in our stock.

THE MOOT QUESTION OF "OVERSTOCKING."

The one mooted question in buying is that of overstocking, and while much loss is occasioned on this account, still I am bound to hold fast to an opinion which crystallized into an absolute conviction some years ago, namely, that *there is much more loss occasioned from understocking than from overstocking.*

This should not be taken as an injunction to general, reckless buying in quantities as large as the seller wishes the purchaser to buy, yet the system of niggardly under-buying has starved many a business man to death, and one cannot but remember the experience of the economical muleteer who finally had succeeded in teaching the mule to live without feed, when it "up and died."

The man who buys 1/12 or 1/4 dozen of an article of which he could have easily used 1 dozen, has made his chances of being found without goods 12 or 4 times as great as would have been the case had he purchased in a reasonably decent quantity.

"THE SMART UNDER-BUYER."

The smart *under-buyer* will tell you that "You can always buy more goods," which of course is true, but between each purchase there is the *dangerous interim* when you may be out of stock, or you may not think to put the article down in the want-book until a sale has been lost.

Where goods are obtained from some little distance, the obstacles to obtaining stock become greater, and the necessity for properly estimating the amount of stock needed is more apparent.

Even in the cities, where supplies may be obtained by messenger during any business hour in the day, a considerable business may slip through one's hands, simply because the customer will not wait for the slothful business man to put in stock the article that his neighbor, who is more vigilant, has at hand all ready to be wrapped up.

Again, no source of supply is unfailing, and some of the most staple articles are frequently not to be obtained from your jobbing house. Therefore the more necessity for placing in stock at the time each purchase is made a quantity that will be thoroughly commensurate with the demand.

A STRIKING EXAMPLE TO AVOID.

I well remember a druggist of the old school who was, at one time, doing reasonably well, and for whom I worked some little time during my early years in the business. This man seemed every day to be in doubt whether the regular staple articles upon his shelves would continue to be in demand after his present supply was exhausted. The result was that, before another purchase was made, he would actually allow a customer or two to call for a staple article after the stock had been exhausted, seemingly needing to have his commercial courage braced up each time for the ordeal of venturing the purchase of another 1/4 or 1/2 dozen of a staple article!

Though but a boy at the time, it was absolutely depressing to my commercial nervous organization to see business thus frittered away. This man, by force of frugal habits and small personal store expenses, as well as having a fairly good neighborhood location at the time, was in what seemed, from his standpoint, thrifty circumstances, but his absolutely wrong system of supplying stock was, I am sure, an important factor in finally bringing him to bankruptcy, and at last accounts a member of his immediate family was an inmate of a charitable institution.

When the buying of drug-store requisites broadens out to the wide field covered by the manufacturers and importers of to-day, a much greater scope of vision is required, as

well as a much closer analysis of individual terms and respective sources of supply.

BUYING DIRECT AT FIRST HAND.

The large retailer who would buy at first hand as much as possible must certainly install some system of keeping proper records of the names of manufacturers and the articles comprised in the output of each of them. Here is work which requires the most accurate knowledge of detail, and here again the matter of quantities, discounts, and terms must be weighed carefully against the amount of money invested. One must consider whether the goods could be obtained at any price from your jobber, and whether the line might be handled as an exclusive agency. Thus all the varying elements of commercial loss and gain and supremacy are involved in this subject, which must be settled by the buyer.

Drug-store buying is, perhaps, a little different from any other kind of buying in that there are so many articles in which the discount extended is dependent entirely upon the quantity of the purchase. While the advantages of grouping purchases from the jobber, when made in small quantities, and obtaining them all from one house and in one shipment, are to be considered, there are, of course, many advantages in purchasing goods *direct* from *first* hands.

The firm which buys its soaps and perfumes from the house founded something over a century ago near Castle Garden, has the advantage of having its orders filled completely, of getting all the "free goods" deals handed out from time to time, and, we hope, of getting full discounts, all of which produce the comfortable feeling that you are on as good a selling basis as any competitor possibly can be.

GET ON THE "DIRECT" OR "PREFERRED" LIST.

Where the shipping quantity is not unreasonably large, it would seem to be proper business practice to make as many of these connections as the size of the dealer's output would justify:

There is a compensating element all through the buying game that should be easily estimated by buyers and sellers all along the line. The dealer who buys \$500 worth of a certain line of imported soaps and perfumes in order to get a 5- or 10-per-cent discount is perhaps in position to know that he has all this line of

goods at the very lowest prices, and that they are fresh and genuine. In fact, he is thoroughly posted on the line.

In this way, while the jobbing house has lost this order, it has also gained a more reasonable customer, for when this same dealer applies to him for any of the items in this line (of which he may temporarily be in need) he knows from experience that the middleman's profit is not any too large, and, if reasonable, he should be willing to pay the price usually asked by the wholesaler. French soaps and perfumes bought in \$500 quantities, f. o. b. New York, with only 5 per cent discount from list, cannot be sold at list in western markets, and the dealer must expect to see the importer's list advanced five or ten per cent. These remarks apply to such goods as Houbigant's, Roger & Gallet's, and Piver's, all of which are sold f. o. b. New York, with only 1 per cent for prompt cash and with very small discounts only for import quantity orders.

"FREE GOODS."

During the past few years the matter of free goods with purchases has been so important an item as to demand the best attention of buyers. The list of articles with which substantial bonuses are given in the way of free goods is quite a long one, and has included many kinds of standard toilet goods and perfumes, malt extracts, cigars, and a considerable number of proprietary articles.

To overlook buying these goods at the proper time in order to obtain the bonus is certainly to throw money away, if any demand exists for the goods, and here is a chance for more vigilance on the part of the buyer. Indifference on this subject means wastefulness.

A "PRICE-BOOK" DESCRIBED.

Where much direct buying is done, it is no easy matter to remember the source of supply where a certain article is obtained, and to assist along this line records can be easily kept that will have a value far out of proportion to the time spent in compiling them.

The best method of which I have knowledge is the use of a book known as the "loose-leaf price-book," the leaves of which are separated by indexed sheets, and from which leaves may be readily removed or replaced so

that any desired record may be type- or hand-written and filed for future use.

In the keeping of such a book, a method must be worked out which best harmonizes with the mental squint of the buyer who is going to make use of this book; for instance, in my own case, under "M" I have grouped all the malt extracts. Here data are kept of the exact source of supply of each product, the price usually paid, the number of bottles in each original cask or case, the allowance for empty bottles, and the points as to cash discounts and whether goods are f. o. b. shipping or destination point.

The rule made in this particular instance, however, is contrary to the way the book is kept as a whole, for I have taught myself in indexing to think of the name of the concern with whom the business is going to be done.

THE INDEXING OF THE BOOK.

For instance, if Capadura cigars were to be obtained I would turn to "B," where on a page, or part of a page, devoted to the firm of Best & Russell of Chicago would be found grouped all the articles purchased regularly of this house, these items being typewritten on the page. Under the same letter "B" (to give actual instances) would be found pasted on a page a small, printed sheet, about 3x6 inches, which bears the name of all the articles made by Dr. J. H. B. Co., this being the printed list supplied by the house giving the regular jobbing price per dozen, and the retail price of a single package, of each article made by them. On this slip is noted the quantity required to obtain maximum discounts, and also information as to cash discounts and whether freight is paid by the sellers or buyers.

Under the letter "R" is a page devoted to the goods of Roger & Gallet, with the New York address of the importer. This firm, of course, like many others, supplies a price list which gives all the information that I have in my "buy book," but it is perhaps scattered through some hundreds of pages. In my book is a list of articles we regularly handle from this line, with their proper catalogue title and number, and the wholesale and retail price. Possibly 50 or 60 lines of information, written on this page, give absolutely all the information we need as to the identity, cost, and selling price of the articles handled by our firm from this long line of goods.

To obtain such information readily from the firm's price list at the moment needed is a more vague and difficult task than one would think, even if he is familiar with this sort of work. All doubt and uncertainty are removed by the little care and work indicated.

"SPECIAL BRANDS."

Where "special brand" goods are made by manufacturers, some system is needed to be able to obtain these goods readily when they are required again, without loss of time in identifying the articles needed. This trouble can readily be obviated by keeping a record under the name of the firm from whom the purchase is made, stating the name of the private brand, where and when obtained, and in what quantity. In this way time is saved and confusion is avoided.

Under the heading of "Standard Oil Co." in my buyer's book I have entries made of barely a half-dozen items, but these are things that it is found convenient to refer to quite frequently. The record makes buying and selling easier, and grounds them on the solid foundation of absolute fact rather than guess-work.

This particular record, to quote some special items, reads:

- 5—1-'09—10 cases 100 lbs. each Paraffine at
cents per lb. in 1-lb. cakes, our name on
wrappers.
12—6-'10—1 barrel No. 0 Petrolatum, 36½ lbs. at
cents per lb.

In such a record, well kept, is found the best possible basis for careful, correct buying and larger and better sales. As regards lines of goods where hundreds and thousands of articles are purchased from a single manufacturer, as, for instance, the products of pharmaceutical houses, reliance must be made almost solely on the current price lists furnished by these firms, and it is necessary for the buyer to be posted only on the discounts extended on these lines; but here, again, prices extended on certain *special items* obtained from one of these firms may be grouped under the heading of that firm, where ready references can be made when needful.

KNOW THE COST AND SELLING PRICE!

These remarks would particularly apply to "name goods" or "customer's card" articles put out by such houses where the identity of the maker is somewhat difficult to remember.

An adequate knowledge of the *cost* of goods and the *selling* price is a very important and yet much neglected consideration all along the line in the retail drug trade, and this subject is closely allied to buying.

In a stock of goods recently acquired, whole lines of articles were found with absolutely no cost or selling prices attached to them; in fact, there had been an absolute disregard of these details all through the business with so much guessing left to be done each day that it is not strange that the business was not a successful one.

THE REQUISITES OF A GOOD BUYER.

It would seem that the primary requisites of a buyer are to be able to estimate, by the light

of experience and reasoning by analogy, just how successful a new line of goods is likely to be; to have the courage and sagacity to take up such articles at the psychological moment and not wait until the day after the show to look for the elephant; and last of all to remember that buying is of first importance in the welfare of the business, that goods can only in rare instances be sold before they are bought, that the work of purchasing must receive careful, methodical attention every day, and that each item of stock for which some customer is likely to call in the store is an invisible thread drawing that customer to the establishment. If the customer is disappointed by not finding the article sought the thread is broken and may not easily be repaired.

PAINTS AND BRUSHES IN THE WINDOW.

We are showing this month another one of the window displays designed by J. Earl Taylor, Ph.G., Gridley, Ill. It was devoted to the line of paints and brushes, and while it was gotten up during the spring, it is almost equally applicable to the fall. Mr. Taylor

color cards were also featured here and there throughout the window, and specimen cans of the paints themselves were exhibited. Wallpaper cleaners were made a part of the trim. The color scheme of the window was red and white, and there were several placards to tell



assures us that the window display proved a money-maker and resulted in a much greater sale of brushes than had been realized the year before.

A showing was made of every particular kind of brush carried in stock. Paint and

the observer quickly what it was all about. The background, as will be seen from the engraving, was carefully worked out, and must have assisted to make the window very attractive. Other details of the trim are self-explanatory and require no description.

DOLLAR IDEAS

SMALL CONTAINERS IN THE PRESCRIPTION DEPARTMENT.

John McCofflin, Vicksburg, Miss.: Every druggist knows that there accumulates in the prescription department a lot of small containers of various chemicals which take up a good deal of room and are frequently rather hard to find when wanted. To obviate this difficulty we got up a series of 15 cardboard boxes of uniform size and provided with covers. These occupy the entire top shelf of the

<i>Amn. Sed. Atropine</i> <i>Antitussive Aspirin</i> <i>Ang. med. Ang. Med.</i>	<i>Berlin Mun</i> <i>Bisone</i> <i>Methylth. Blue</i>	<i>Cougher</i> <i>Chlorotane</i> <i>Codeine</i>
# 1	# 2	# 3
<i>Amn. Sed. Atropine</i> <i>Antitussive Aspirin</i> <i>Ang. med. Ang. Med.</i>	<i>Berlin Mun</i> <i>Bisone</i> <i>Methylth. Blue</i>	<i>Cougher</i> <i>Chlorotane</i> <i>Codeine</i>

prescription case. Each box is 7 inches long, 5 inches wide, and 3 inches deep. The boxes are numbered from 1 to 15 on the front edges of the covers. The small bottles of chemicals, etc., are placed upright in the boxes, and the contents of each box are then written in duplicate on the top and on the front of the boxes, as shown in the accompanying rough pen sketch. This method has proved very satisfactory for the keeping of small packages of such things as aspirin, atropine, codeine, dionin, and the like.

CO-OPERATIVE LOCAL ADVERTISING.

Frank Green, Jr., Skidmore, Mo.: This is an idea that we use very successfully. We keep a list of the manufacturing jewelry, sundry, proprietary and patent medicine concerns, etc., whose goods we stock and desire to "push." To these concerns we mail postals twice a year, asking a share of any advertising they may have for local display or distribution. We also request their coöperation in local advertising, assuring them of our desire to use it for our mutual benefit. We mail these requests about May 1 and October 1, and we always receive a very generous response from the various houses each time they are mailed. The careful, judicious use of this

local advertising has greatly repaid us by creating a demand for goods from which we have reaped a profit that would have otherwise been lost.

USING A SLOGAN.

O. P. McPherson, Gloster, Miss.: Many people throw away more money in badly managed advertising than others make. An advertisement not properly worded is worse than none at all. If you adopt any phrase, word, or sentence, push it until it becomes a household word. Repeat the slogan until it belongs to you. One of my expressions is: "'Tis push or we'll get pushed." Two seasons ago I had some fans gotten out bearing my ad., etc., and had printed on them this verse:

Lady, if by chance you should fan
The August wind to the proper man,
Don't use this fan to hide your blush
But keep it going with the proper push,
For this day and time in which we stand,
Like time and tide, wait for no man.
And this our MOTTO as the trade we rush:
"'Tis either push or we'll get pushed."

All our bill-heads and letter-heads bear that sentence. It belongs to us.

TO REMOVE TIGHT CORKS.

Stewart T. McGee, South Berkeley, Cal.: In pulling a cork it sometimes sticks so tightly that the corkscrew is drawn out through the stopper, thus mutilating it. The cork must then be removed piecemeal, and consequently small pieces drop into the container, with the result the liquid must be strained.

To prevent this accident insert the corkscrew between the cork and the lip of the container. The stopper will slip out easily.

TO REMOVE SILVER NITRATE STAINS.

P. I. Minton, Plainfield, N. J.: First saturate the spot with tincture of iodine, then decolorize with sodium thiosulphate. This never fails.

An ink spot will always yield to this process: first apply with a camel's-hair brush a 50-per-cent solution of Javelle water, then a 20-per-cent solution of acetic acid. Afterwards rinse with pure water and the stain will vanish.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

A CIRCULATING LIBRARY.

To the Editors:

Being very much interested in Mr. C. A. Weaver's article in the July BULLETIN on conducting a circulating library as a side-line in a drug store, I submit my own ideas.

Being in a town of about 3000 inhabitants, my plan differs somewhat from his and I think is much less complicated. I have a sheet like No. 1 pasted in front of the book,

THIS BOOK IS THE PROPERTY OF					
The Keifer Drug Company's					
Popular Fiction		Library			
Marshall, Ill.			Telephone Wabash 8		
All the new books all the time—others on request					
Out	In	Out	In	Out	In
Damages, beyond reasonable wear, and losses must be made good by the borrower					
Join our Magazine Library. Thirteen of the popular magazines. You may read the entire list for 25 cents per month.					

No. 1.

then an ordinary tablet much like No. 2 keeps a record of the book out, to whom rented, etc. I charge three cents a day with a minimum rental of five cents. A book is usually borrowed for from one to three days, which makes the rental reasonable even at three cents a day.

I can tell at any time what each book has earned. I started December 1, 1910. At that time I bought twenty-five new publications, knowing that I needed the books that were being advertised and reviewed in the daily

papers and monthly magazines. From time to time I have added some popular copyrights and new publications, buying copyrights which I had read and knew to be good. I now, on August 1, 1911, own seventy-five books, most-

Name of renter	Title of book	Date out	Date in	Total of rental

No. 2.

ly publications of the past season, the balance being popular copyrights.

When any strangers come in I require a deposit of \$1 on each book. When it is returned I give back the dollar less the rental. After eight months I have paid for all books and magazine subscriptions, and have a profit of \$27.52.

Mr. Weaver, speaking of "The Rosary,"

Keifer Drug Company's	
MAGAZINE LIBRARY	
Marshall, Ill.	Telephone Wabash 8
1. Argosy	7. Hampton's
2. Ainslee's	8. Lippincott's
3. Adventure	9. Ladies' Home Journal
4. Blue Book	10. Munsey's
5. Cosmopolitan	11. Metropolitan
6. Everybody's	12. Popular
13. Woman's Home Companion	
TERMS:—Membership is free. You may read the entire list for 25 cents per month.	
RULES:—You can have one magazine at a time. Change as often as desired, or can keep magazine 7 days.	
Our Magazine Cover insures each person getting a clean magazine at all times.	
JOIN our Circulating Library of Popular Fiction. No membership fee. Rental fees, 3 cents a day per volume. Minimum charge, 5 cents. All the New Books All the Time.	

No. 3.

says that it has been the best renter, being out almost constantly.

I have only lost one book. Our plan has been to give a customer an opportunity to buy a book outright where the rental is unusually high. In connection with the book library, we have conducted a magazine club which

pays splendidly. I subscribe for thirteen best-selling magazines. At first I had sixteen, but 13 was enough. While this paid, we reduced the number to twelve a month. That, we felt, was sufficient considering the charge. No two good magazines can be bought on news stands for 25 cents. I have stiff covers for each magazine, with a slip like No. 3 pasted on the front. I take the name of the subscriber and the 25 cents in advance each month, giving the customer the privilege of reading all twelve.

I find the average reader will get over six to ten a month. Outside the combined profits from club and library, the pleasure of handling, reading, and owning a nice little fiction library has been much. One should read the books as soon as possible and know the readers' tastes, so as to be able to suggest books to patrons in doubt. I find much can be done by "talking" the books. People left to make their own choice will often go out without a book.

As Mr. Weaver sums it up, the advertising is good. Books often appeal to people whom nothing else will attract. You gain customers by talking literature to one brought into your store by such a library. You can gain a friend also, for there is no medicine that will bring people nearer together than books in which each is interested. The cooler months are the reading months. Then when soda business is light, your library returns will, if conducted rightly, average up with those of the other side-lines.

ADDIE B. KIEFER.

Marshall, Ill.

THE POISON LAW.

To the Editors:

I was very much impressed by the article "Sane Comment on Current Topics" in the July issue of the BULLETIN, and particularly the comment on the "Poison Cork Bill" or the Hinckley Bill. I have in mind, however, an idea which I think I shall put in practice as soon as I can devise a suitable form under which to adopt it.

From a number of the BULLETIN about two years ago I appropriated this idea regarding the sale of liquor and poisons, which I found resulted in much good to myself and disturbed many sales of would-be boozers who simply would not sign such a blank for fear

of getting in trouble, while all honest buyers had no fear of signing it at all. My idea is to draw up a form similar to this plan, something on the following order:

"As the law known as the Poison Cork Law of the State of Michigan requires that all poisons in Schedules A and B including (names of all drugs affected to be inserted here) be put in a container having a cork with a serrated, metal, glass, or celluloid edge sufficient to designate the same as a poison in darkness or daylight and approved by the State Board of Health, therefore I (name of purchaser), the undersigned, hereby certify that (the name of druggist) the person or druggist from whom I purchased (2 ounces of carbolic acid) on (date) fully complied with such law and delivered same to me in proper condition as required by it.

"Signed (by person making purchase and address of same)."

Then I should file these away in a scrap-book, fastening them in the order purchased as would be designated by date on each. Kindly discuss in next issue of BULLETIN, and oblige,

L. M. O'DELL.

Webberville, Mich.

[EDITOR'S NOTE.—We shall be glad to have any expressions of opinion on this subject.]

SHORTER HOURS.

To the Editors:

In your May number I noticed a letter signed "Burton L. Bennett" *re* chemists' assistants' hours.

He throws cold water, almost ice water, on the sixty-hour project. Would it surprise "B. L. B." to know that in this State a sixty-hour week has been compulsory since 1899? I do not notice much amiss taking place among the pharmacists here. And, too, for two years we have been working under a ruling of the court making an assistant's week fifty-seven hours. Still, marvelous to relate, business continues at the same old address. If Mr. Bennett accepted sixty hours for a week's work, anybody not absolutely prejudiced could see the men would be fresher in brain and body and better for their master's business and their own welfare. Examine this extract from our friend's argument:

"The clerk . . . has many leisure moments in which to chat with friends, etc."

The obvious answer is, at any rate in a busy pharmacy, "Yes, I don't think."

In conclusion, sirs, I submit the following resolution:

"That as forty-eight hours are a fair week's work for a laborer or tradesman, so an assistant who desires a sixty-hour week is not only not unfair to his employer, but is distinctly unfair to himself."

I have seconded the above and carried the motion, so don't worry. I also move that three hips and one hurrah be given the shorter-hour movement and groans to "B. L. B." and his friends.

ALF C. DASH.

Coogee, Sydney, N. S. W.

MORE ON BEER SEED.

To the Editors:

On page 263 of the June issue of the BULLETIN you reply to my question as to what is beer seed. Recently I found an article in the *Home and Farm*, Louisville, Ky., July 15, 1911, on the same subject. It reads as follows:

"That little item, the jar of beer on the cook table, has stirred up quite a hornet nest of interest. Three dozen is a safe estimate of the number of inquiries that have come. And the range is rather large. In every Southern State except Florida and Virginia, and even as far north as Idaho and away out in New Mexico, calls have come for beer seed. I believe I would be safe in saying that altogether it has taken more than half a day to attend to them, but I do not begrudge the time; it has given me a great deal of pleasure to thus serve my fellow men. I have learned some things about it that are worth a little something.

"The seeds, it is said, may be dried, put away and kept indefinitely. One correspondent asked for some; but the writer put some 'green' in a small tin box and sent it along, his 2-cent stamp being ample, and sent it under seal. A neighbor said yesterday that one way to get a start was to boil whole kernels of corn till soft, add plenty of water and molasses, and let it develop an acid.

"This is called corn beer and is often made. If the fermentation continues long enough, in time it will develop seed; and that was the way it was started. He was sure of this, for

his mother had often made the seed that way. It seemed to work best with sorghum syrup. The writer has been trying it with granulated sugar and finds it makes something fine, but it takes longer. With sorghum it will in time make a fairly good vinegar. It might also ferment with other sweetening."

Gratz, Ky.

W. R. MINISH, SR.

PATENT MEDICINES AND THE DRUGGIST.

To the Editors:

If the druggist does not make 10 per cent profit on the patent medicines he handles, he *cannot* do business without a loss. Here are the auditing of bills, the investment of money, the clerk's time, wrapping, etc. Every now and then the clerk will break a bottle, but the proprietor never hears of that unless he is on deck at the time. The clerk will throw the debris in the waste box or basket, or in the ash barrel. He will not want to be accused of carelessness. This is a direct loss.

Next comes a frequent customer who asks for a little credit. You do not like to refuse. But he will defer settlement, and perhaps through hard luck will never pay. Another: A lady rushes into the drug store in a hurry and says, "Please give me a bottle of Lydia Pinkham's Compound, Swamp Root, or Pierce's Golden Medical Discovery." She feels for her pocketbook and then bursts out: "Oh, Mr. Druggist, I have left my pocketbook at home on the bureau. I will pay you when I come over again. My daughter hurried me so as she wanted it right away, and I have to hurry to satisfy her. I will pay you tomorrow."

Perhaps you will never get it. Ordinarily you can charge it up to profit and loss. The druggist usually says: "All right, Mrs. Brown, take it along—you can pay for it when you come again."

The foregoing is, I think, the practical every-day experience of the average druggist.

Camden, N. J.

JUNIUS PESTLE.

SOME THOUGHTS ON WINDOW DISPLAYS.

To the Editors:

We allow our displays to remain one week, making alterations occasionally during the week. Our window is the most unique in material and appearance, being considered by

our patrons and passers-by as first-class, up-to-date advertising. We never use crêpe paper, having special fixtures of mahogany and oak and glass shelves. A plate-glass French mirror supported by nickel brackets sets in back of the glass shelves. The display of articles is very unique and gets business.

We always display sundries, stationery, toilet articles, rubber goods, surgical supplies and appliances, in fact a full sundry line. This brings more customers to our store and helps to sell the goods.

During the months of May, June, July and August we constantly display hydrogen peroxide, our usual trim consisting of 5 gross, which sell very fast.

We never display patented medicines, nor do we advertise them, aiming at a strictly ethical way of doing business. The following are our reasons for eliminating patent medicine displays:

1. The public attention need not be brought to the display of patent medicines, for such goods are constantly advertised on bill-boards and in the press. If people are in need of any article they go to a local drug store and ask for it.

2. Is a patent display profitable? No. I refer to the cut-price evil, excessive competitions, small margin of profit, etc.

3. Does the patent medicine manufacturer pay the druggist for window space? Most emphatically no. We adopt a strictly ethical standard for window displays as well as for other departments of the store.

Chicago, Ill.

V. B. R. SIMANOVSKY.

PUSH YOUR OWN REMEDIES.

To the Editors:

I have been reading with interest the articles on "The Druggist and His Profits."

Your columns should be filled each issue with details of how to overcome the low earnings. To my mind the important question is this: What does your *bank account* show at the end of the year after all is cleaned up, rents, salaries, losses, etc.? How can one swell it? Only profits will do it.

What is your Dispensary for, books of pharmacy, etc.? Hunt the channels of profit. Manufacture and get into a beautiful line of work.

What does a physician get for his work?

The earth! A homeopathic one-ounce dilution brings 25 cents. It costs about 3 cents. But we pay \$8 a dozen for patent medicines which can be mixed, boxed, and made ready for shipment for \$1.50. I make everything but the shelving and glassware.

Come out of it. With sympathy for all pharmacists that need repair, I am,

Yours,

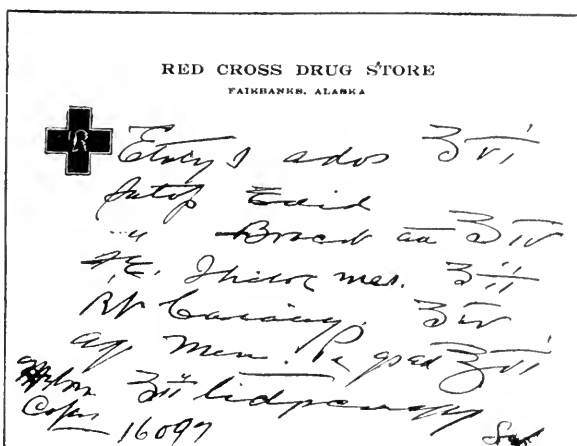
Pawnee, Ill.

O. N. SPRAGUE.

HE MADE IT OUT.

To the Editors:

In our May issue we reproduced the following illegible prescription:



W. Moltzen of Fairbanks, Alaska, has evidently succeeded in deciphering it. He writes:

"The foregoing prescription is evidently written backwards. That is a nasty trick on the customer, but I have known it to be practiced by the drug stores in some localities. I have been up against the same thing myself.

Soda salicylate.....6 drachms.
 Potass. iodide,
 Potass. bicarb., ää.....4 drachms.
 F.E. colchicum sem.....2 drachms.
 Tr. guaiac.....4 drachms.
 Aq. menth. pip., q. s. ad.....6 ounces.

M. ft. Sig.: 2 drachms t. i. d., p. c. in aq.

"We always use the true soda salicylate in this mixture. When finished the prescription is a beautiful greenish color."

Fairbanks, Alaska.

W. MOLTZEN.

To the Editors:

The BULLETINS contain so much good reading that people try to swipe them out of my store.

H. L. MITCHELL.

THE SODA FOUNTAIN.

SOME SODA POINTERS.

BY JONAH F. RUPERT.

Plain sodas are not much called for at present, it seems. However, they are rapidly dispensed and offer better profits than fancy drinks and perhaps ice-cream drinks.

At present I see some fountains supplying plain sodas in straight glasses, drawing them "solid." Others still stick to the bell glass and foam. Personally, I would advise the bell glass for vanilla and chocolate when dispensed with cream, and the straight glass without foam for other common flavors. It might be a good plan to dispense straight sodas without a holder, especially at the counter. I rather favor the plan, but never formed a rule as to this idea.

Ice-cream sodas foam easily enough, and soda foam is of no use in syrup when phosphates are dispensed. Soda foam does not add to the flavor when dispensed with syrups, and, indeed, increases any tendency to sour.

As regards chocolate, the best should be used. Chocolate should always be heated to boiling before dispensing. Vanilla should be added as directed to the chocolate syrup. Chocolate should never be dispensed from cans for the reason that the can cannot be easily cleansed and chocolate should be well shaken before dispensing. The fact is that many people will judge your ability as a soda expert by the quality of your chocolate.

Soda water must be well mixed with the syrup. It will not do to trust to the "fine stream" to do this for you. This only takes time and does not insure a thorough operation. Stir with a spoon. This stirring might be done when the desired amount of solid water is delivered into the glass; then finish with the fine stream, if desired.

SERVING ICE-CREAM SODAS.

In mixing an ice-cream soda, I always insisted on one point. In this I have been encouraged by the like practice of many other fizz artists and the advice of expert soda men. In Remington's "Practice of Pharmacy" I read these words: "In dispensing ice-cream soda first mix the syrup and soda water thoroughly with a spoon before adding the ice cream." This is the point I have always insisted upon, and it seems so reasonable that I cannot see why any one should want to advise the contrary on this subject. I believe this very point will do much to either please or displease the customers, according as to whether it is or is not followed.

For instance, suppose we run in the syrup, add the ice cream, and then the soda. Usually those who practice this trust to the fine stream to stir up the mixture. A sweet lady customer applies her dainty lips to the julep, and if the straw has been pushed to the bottom, as is most likely, she receives almost pure syrup into her mouth. Pure syrup might not be thought as distasteful as pure soda water. Indeed, pure soda water

is enjoyed by very few when unmixed with sweetening and flavoring. Should she not press the straw to the bottom we likely will be asked to add more syrup to the mixture, for the reason that the part she drank was not sufficiently mixed with the syrup at the bottom. Either way, we have "balled up the matter."

Still a worse plan is to put in the ice cream first, then the syrup, and again, finally the soda. This plan allows for running in almost any amount of syrup, for we cannot well judge of the amount because of the contained ice cream. I run in the syrup first, add considerable water next, then stir with a spoon. Next I add the ice cream, and finish with the fine stream, giving as liberal a quantity of ice cream as possible.

GET 10 CENTS.

Never charge the same price for ice-cream sodas and plain sodas—certainly one is worth more than the other. Usually those who furnish ice cream with 5-cent sodas also furnish a 10-cent ice-cream soda, and the practice leads to hopeless confusion. Give a strictly plain soda for 5 cents and a strictly first-class ice-cream soda for 10 cents.

Should you meet with a customer who insists on having the ice cream in a soda for 5 cents, rather than fuss and hand him a bit to satisfy him, at the same time properly explaining the matter. Of course, we will not expect that many of these cranks will appear and insist on having ice cream in the soda for 5 cents. Usually they really do not want the ice cream, but only want to quarrel.

SELLING MINERAL WATERS.

As to selling mineral waters, it requires little investment to keep several bottles of several kinds on ice. Mineral water, especially the bitter waters, are very distasteful when not cold. I would not recommend a fountain doing a small business to attempt anything more pretentious than "splits." However, a local trade might be developed on a small scale on a standard water, usually bitter water, furnishing several doses to the bottle.

In the soda business we must not attempt too much. Much rather have a small business, conducted on thoroughly adequate principles, than a large business with inadequate facilities.

As glasses represent a considerable part of the expenses, a tendency exists to use glasses having chipped rims. However slight this chipping may be, discard such a glass. The appearance is most decidedly bad. It need not be thrown away; it can be used at home, or sold to friends at a reduced price.

All metal about the fountain must be kept brightly shined. Also, all spoons and other silverware must receive prompt attention.

Mirrors must be kept clear of fly-specks.

CLEANING GLASSES.

Soiled glasses must be removed at once; the tables then thoroughly cleansed. The practice of some clerks of spreading a few drops of melted cream or syrup all over the table with a towel and calling the operation cleansing, makes one indifferent to the best interests of the fountain. A sponge should be kept solely for this service, and must be kept washed out in soda water. After the spilt matter is removed, the

other parts of the table can be washed with the sponge before the spots are touched up; the whole having been sponged, all is wiped dry with a towel.

We must be careful not to apply the unrinsed soda sponge to the varnished surface of a table as it will remove the paint. Marble or stone-surfaced tables, however, allow the use of alkali solutions in cleansing. Tables should be thoroughly washed at least once daily with soap and warm water. The use of display tables is an expensive investment, and their surface requires more work and attention to be kept in a shining condition. However, we find them in the most elaborately furnished rooms.

Nothing dissipates a soda appetite as thoroughly as sitting at a table some time before the soiled glasses are removed. I make it a plan of not allowing customers to be seated before the tables are cleared away, should matters be somewhat delayed in case of a rush.

As to washing glasses, I always have used a solution of washing soda. The washing bench is arranged so that on one side is contained a strong solution of washing soda, about 2 pounds to 4 gallons of water. The glasses can then be rinsed either in flowing water or in a reservoir and placed on a drain board. This soda solution removes the fat thoroughly from the glasses, and when rinsed in clear water they present shining sides. Glasses should always be dried and shined before reusing. A wet surface against a lady's glove or hand will not improve business.

SOME ICE CREAMS.

BANANA ICE CREAM.

To make one gallon of banana ice cream, reduce six nice, ripe bananas to a pulp by beating them with a cream beater, and then mix eight or ten ounces of sugar and the juice of one lemon into the pulp. Add five pints of cream and freeze. The usual amount of gelatin should, of course, be added to the mixture. The cream can be replaced with any desired mixture, the quality of the cream depending entirely upon the mixture used. The above quantity should produce with the proper swell about a gallon of banana ice cream.

PINEAPPLE ICE CREAM.

To prepare pineapples for use in ice cream, peel, remove the core and eyes, and run them through a fruit chopper, using a very fine cutter. Use about two quarts of this fruit to a five-gallon batch; more can be used, but this will give a good flavor. For five gallons use eight or nine quarts of cream or any correct mixture of cream and milk; three and one-half or four pounds of sugar, and two ounces of gelatin or other binder. The sugar may be dissolved either in the fruit or the cream, and should be mixed just before freezing. Some cook the pineapple until it is tender, but to our minds the raw fruit is better.

CARAMEL ICE CREAM.

No. 1.—Caramel ice cream may be made by adding caramel (burnt sugar coloring) to any standard vanilla mix, a pint of caramel being about right for a forty-quart batch.

No. 2.—The following will be found to be a very satisfactory formula for the preparation of this cream:

Place seven pounds of sugar and one quart of water in a copper pan and let it come to a boil; add the juice of one lemon or a little cream of tartar. Take off any scum with a skimmer that may arise. Wash down the sides of the kettle with a wet sponge, being careful not to allow the sugar on the side of the pan to brown or burn and thus cause a bitter taste. Boil the sugar to 315° or 320° and watch closely; at this point it turns yellow, begins to smoke, and turns brown. A large batch will look darker than a small batch in the pan. This point will be about 340° to 350° Fahr. When it reaches a brown color put in one quart of water very carefully, because it will boil up suddenly and act just like water poured on a hot stove. The water prevents the sugar from turning black and checks the boiling. Now remove the syrup from the fire and gradually add to it one gallon of the cream. Mix your filler with the balance of the cream—about three to four gallons—and bring both together; let it cool if too warm and freeze. When frozen add a little extract of vanilla.

Another method is to boil the sugar to 315°, then to watch very closely until it reaches from 350° to 360° and turns brown. Take off the fire and turn on a slab, spread very thin, and when cold grind into a powder, using as much of this as necessary to impart the desired flavor to the cream, dissolving it warm.

When a really fine caramel ice cream is wanted boil the sugar to 265° and add one and one-half pounds of blanched and dried almonds, cook until the almonds are well roasted, and pour on the slab very thin. When cold grind as above and use about one-half pound of it to each gallon of caramel ice cream, adding sufficient caramel coloring, vanilla beans, and two drops of rose flavor.

THE ORANGE AND ITS USES.

The orange is one of the most useful of all nature's products to the dispenser of carbonated beverages, and with the possible exception of chocolate, there is no more popular flavor at the soda fountain than orange. Perhaps the best of all orange drinks is the orange phosphate; and it is not to be wondered at, for it is one of the most refreshing drinks that can be served. Oranges are also employed in the preparation of many of the fancy drinks that are now so popular, as the phosphate and orange syrup forms one of the ingredients of many of the fancy and tonic syrups.

In an article of this nature it would, of course, be impossible to give all the formulas in which orange and orange syrup are used; but we shall endeavor to give those in which it can be said to form one of the principal ingredients. Orange as a flavor possesses many advantages. It is acid, and yet does not possess the decided acid taste of either the lemon or the lime. In it we seem to find a happy medium so desirable in fountain beverages, in that it satisfies the taste of the majority. It would probably be hard to find any regular patron of the soda fountain who does not at some time, in the course of the season, take either an orange phosphate or some other of the beverages of which orange forms the principal part. No syrup enjoys such an extensive use for the flavor of egg drinks as the

orange syrup, either alone or in combination with other flavors. It is probably the best flavor for this purpose that the dispenser has found up to the present time. Although there are several ways in which orange syrup may be prepared, the best, as is the case of all other fruit flavors, is made from fruit direct. Several formulas for manufacturing are published, but the fruit syrup is strongly recommended, although there may be cases in which some other method of its preparation may be advisable.

ORANGE FRUIT SYRUP.

Select from six to eight fine, juicy oranges, according to the size and strength of flavor desired. In selecting oranges, choose those that have a dark, richly colored skin—that is, rich in oil—as they will impart the pleasing color to the finished drink without the aid of any coloring matter. Our experience leads us to believe that the California navel orange is the best that can be obtained, as it gives a fine color and is rich in natural flavor. Next to the navel orange is the Vanicila seedling or California summer orange. Care should be taken that the fruit is both sound and ripe. Having selected the fruit, the next step is to grate the rinds. In doing this, you must be careful to grate only the yellow part. When all the oranges have been grated, place the gratings in a suitable vessel. At this point there is a choice of methods of procedure: you may either add your sugar alone, or you can first add a little alcohol, and then the sugar. Some dispensers claim that a better syrup can be made by the use of alcohol; but many varied and careful experiments have led us to believe that the alcohol is unnecessary, and may as well be eliminated from the formula.

If the alcohol is used, pour one-half to one ounce of alcohol over the gratings, and rub well for a few minutes to allow the alcohol to cut the oil. Then add from six to twelve ounces of granulated sugar, rubbing thoroughly with a pestle, that the sugar may absorb the oil. If there is too much moisture, more sugar may be added. A little practice is better than any set rule, as oranges vary as to the amount of oil or other moisture which they contain. When the sugar and the grated rinds have been thoroughly incorporated, allow the mixture to stand for a little while—over night when possible. When you are ready to finish the syrup, express the juice from the oranges, strain it through a cloth strainer, and pour it into the mixture of sugar and gratings; stir until the sugar is thoroughly dissolved in the juice.

When this is done strain through a double thickness of cheese-cloth, expressing all the juice that can be obtained by hand-pressure, and add sufficient simple syrup to make one gallon of fancy product. To this may be added, if desired, from one-half to an ounce of fruit acid. Where the syrup is used for ice-cream sodas, it is preferable to leave the fruit acid out, and add a little more of the acid phosphate, when phosphates are called for.

"Practice makes perfect" is a saying that is as true when applied to the preparation of syrups as to anything else. Oranges differ both in size and in flavoring power, and therefore upon your ability to judge when the syrup is just right rests your ability as a syrup-

maker, and nothing but practice and experience can supply this information. It cannot be imparted by instructions.—E. F. WHITE, in the *International Confectioner*.

SODA SIGNS.

"There are more ways than one," says Charles Philip Krauth, of Philadelphia, "of arranging announcements at the soda fountain so as to attract the notice of the passer-by." Writing in *Merck's Report* he suggests a few ideas which have already been tried out. In your neighborhood they may be distinctly new.

"Some druggists with four signs to put up, place them in the four corners of the window, slanting them at an angle of forty-five degrees from side to sill and side to top. This attracts the eye much better than merely pasting each closely into a corner.

"A druggist with an eye to decoration, and three announcements to place, did so in a rather original way. The signs were pasted horizontally across the middle of the glass, the middle sign a little above the other two, which were on a line. Thin bars of crêpe-paper ribbon (twisted) were secured, at the ends, to the back of each sign and stretched down to the back of the sill.

"Another man, with only one sign, made it the top beam in a Greek portico. The sign was placed in the middle of one window-pane. Four pillars, composed of three crêpe-paper ribbons each, stretched flat against the glass from the bottom of the sign to the sill. The elongated, triangular top of the portico was formed of ribbons stretched from regular points on the top of the sign to a rosette a little above the center of the glass.

"A good deal depends on the number of announcements you have to make. There are many variations of arrangements by which you can catch the public eye. But in placing signs always remember that legibility comes first. To paste your announcements one over the other, in a haphazard way, like cigar bands on a plate, would be original, but very few people would ever try to read them."

FANCY LEMON BEVERAGES.

[From the *International Confectioner*.]

A GAME WINNER.

Into a mixing-glass squeeze the juice of one lemon, and add one and one-half ounces of simple syrup, and one ounce of grape juice. Into this break an egg, and add a little finely shaved ice. Shake thoroughly and fill with carbonated water. Then strain into a twelve-ounce glass.

HENRIETTA.

Into a twelve-ounce glass, draw one and one-half ounces of lemon syrup and add the juice of one lemon and two dashes of lime juice. Fill one-third full of fine ice and the balance with carbonated water. Mix and decorate with fruits. An ounce of white grape juice may be added to this formula if desired.

AMERICAN LEMONADE.

Into a twelve-ounce glass draw one ounce of lemon syrup and one-half ounce of orange syrup. Add two or three dashes of phosphate, and one-third glass of fine ice. Fill with carbonated water, mix, and decorate with slices of lemon.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Euthymol Display.—

The window reproduced in the accompanying engraving was gotten up in Kotte's pharmacy, which is located at the southeast corner of 6th and Elm Streets in Cincinnati, Ohio. As will be readily seen, the display was primarily given up to Euthymol Tooth Paste, al-



though some of the other Euthymol products are in evidence here and there throughout the window. From the sign across the front, underneath the window proper, it would appear that the Kotte people do a nice business in ice-cream soda.

A Good Display Sign.—

James S. Gleghorn, proprietor of the "Quality Drug Store" in Waynesburg, Pa., has had the accompanying big sign painted. It is in a location where it shows



to advantage and is certainly very striking. Mr. Gleghorn speaks of it as the "niftiest display sign in town."

In Buying Goods.—

Charles R. Sherman, of the Sherman & McConnell Drug Co., Omaha, Neb., owners of a group of eight or more stores, read an exceedingly valuable paper on the buying of goods at the last meeting of the Nebraska State Pharmaceutical Association. Mr. Sherman went

CHECKER'S TICKET MERCHANDISE

No. Cases, Bbls. or Pkgs.
in this Shipment.....

Date of Invoice.....

Checker

Contents of Pkg.....

Amount of Contents.....

From whom Purchased.....

Cost.....F. O. B.....

Selling Price.....

SHERMAN & McCONNELL DRUG CO.
OMAHA, NEB.

into the subject with characteristic thoroughness, and among other things described his system of recording purchases. A very essential part of the scheme is indicated by the "checker's ticket" reproduced herewith. One of these is attached to every parcel, and the idea is sufficiently self-explanatory.

A Bill-board Ad.—

The accompanying engraving illustrates a bill-board in the town of Emporia, Kansas. Three ads. are to be



seen, and the middle one is that of the Red Cross Pharmacy of Emporia.

W. A. BROWNE, who for the past eleven years has been manager and advertising man for Green The Druggist, Springfield, Mass., resigned his position August 19.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

A Mentholated Face Lotion.

O. P. writes: "Could you publish a formula for a mentholated face lotion for barbers' use, the color of which would be slightly purple? The alcohol content should not exceed 8 per cent. I made a lotion which I thought was similar to one I saw, using potassium permanganate, menthol, alcohol, and water, but I found that alcohol was incompatible with potassium permanganate and also that the latter was incompatible with menthol."

Here are a couple of formulas that you might try:

- (1) Menthol.....12 to 30 grains.
Oil of bergamot.....15 to 30 minims.
Glycerin.....4 drachms.
Alcohol.....1½ ounces.
Ammon. carb.....8 grains.
Tinct. of cudbear.....q. s.
Water, to make.....1 pint.

Dissolve the menthol and oil of bergamot in the alcohol, add the glycerin, and then the water in which the ammonium carbonate has been dissolved. Filter through magnesium carbonate and add enough tincture of cudbear to color.

- (2) Menthol.....12 to 30 grains.
Oil of lavender.....6 minims.
Po. tragacanth.....30 grains.
Glycerin.....½ ounce.
Alcohol.....1½ ounces.
Ammonium carbonate.....10 grains.
Tinct. of cudbear.....q. s.
Water, to make.....1 pint.

Dissolve the menthol and oil of lavender in the alcohol, add the tragacanth and glycerin, then add the water in which the ammonium carbonate has been dissolved. Shake vigorously until a smooth mixture is obtained, and then color with the tincture of cudbear.

A more reddish color, bordering on purple, will be obtained by using carmine in the place of cudbear.

Decolorizing Tincture of Iodine.

F. A. P. writes as follows: "I notice in the July BULLETIN, on page 300, the formula of Emil Reyer for decolorizing tincture of iodine. Mr. Reyer says that his formula is a quick one. The one I use may not be new, but it is even quicker. I should like to have you state to what extent, if any, the value of the tincture is impaired by the decolorizing agents:

Carbolic acid.....½ drachm.
Strong ammonia.....1½ drachms.
Tincture of iodine U. S. P., enough
to make.....1 ounce.

"A little shaking."

It is our belief that tincture of iodine suffers a loss of therapeutic value when it is decolorized. In this formula, for example, the metallic iodine is converted into ammonium iodide, and the salt is in our opinion far less efficient medicinally than the metal. For the past eighteen months we have been running across

literature, particularly in the medical journals, on the use of tincture of iodine for surgical purposes. It is said to have a marked antiseptic property. It penetrates the tissues and disinfects the skin perhaps more effectively than any other disinfectant obtainable. Whether the iodide salts found in decolorized solutions of iodine have this antiseptic property is extremely questionable. True, they do not stain dressings or tissues as does iodine, but it is equally true that they have less germicidal power than metallic iodine.

Show-card Ink.

A. P. L.—A common method for making an ink for show-card purposes is to dissolve a teaspoonful of some aniline dye in a pint of water by the aid of heat, in this solution dissolving an ounce of yellow dextrin to give body to the ink.

Another formula is the following:

Shellac, bleached.....2 ounces av.
Borax, crystal.....1 ounce av.
Water.....16 fluidounces.

Rub up the shellac and borax together in a mortar until reduced to a fine powder; then place the mixture in an enameled vessel and add the water; apply heat, and boil the whole together until the mixture begins to foam, when it is removed from the fire and allowed to cool. The boiling process is to be repeated until all the shellac is finally dissolved. When cold the solution is to be strained through fine cheese-cloth, and constitutes the vehicle for the pigment, sufficient Frankfort black or lampblack being stirred in, together with a little finely powdered indigo to produce a bluish or jet-black color.

A variety of colored inks may be made by the addition of various pigments. A thoroughly smooth mixture should be made of the pigment with the liquid.

If a glossy ink is desired, yellow dextrin should be added in the proportion of 1 to 4 ounces av. of dextrin to 16 fluidounces of ink.

This makes a good black show-card ink:

Asphaltum.....4 ounces av.
Venice turpentine.....2 ounces av.
Lampblack.....1 ounce av.
Oil of turpentine.....16 fluidounces.

Dissolve the asphaltum and Venice turpentine in the oil and with this solution thoroughly incorporate the lampblack.

Rubber Stamp Ink.

A. P. L.—In order to make the ink directed below, first prepare an oil mixture, as follows: Oleic acid purified, 5 parts; castor oil, 53 parts. Mix thoroughly.

Black Ink.—Oil mixture, 300 parts; oil-soluble black, 15 parts. Proceed as directed above.

Blue Ink.—Oil mixture, 300 parts; oil-soluble blue, 15 parts. Heat the oil mixture on a water-bath to blood temperature. Shave the color into small pieces, and stir it into the oil mixture until it is completely dissolved. Let stand for twelve hours, and then strain through a double thickness of cheese-cloth.

To make a glycerin stamp ink take: Aniline water blue, 1 B, 3 drachms; distilled water, 10 drachms; acetic acid, 2 drachms; alcohol, 1½ ounces; glycerin, enough to make 10 ounces. Make a solution by rubbing in a mortar. In the same way, inks of the following colors may be prepared with the above compound menstruum, substituting, of course, the pigment named for the aniline water-blue in the formula given: Violet—Methyl violet (3B), 2 drachms. Red—Diamond fuchsin (1), 2 drachms. Green—Aniline green

(D), 4 drachms. Brown—Vesuvine (B), 5 drachms. Black—Deep black (E), 3 drachms. For bright-red, omit the acid from the solution, replacing it by water, and using 3 drachms of eosin.

Safety Matches.

A. C. M. wants the formula of the substance used on the box of safety matches for striking and igniting the matches.

Here is a formula for both safety match and box. Dip the splints in a paste composed of chlorate of potash, 6 parts; sulphide of antimony, 2 to 3 parts; glue, weighed dry, 1 part. The paste for the rubbing surface is amorphous phosphorus, 10 parts; oxide of manganese, or sulphide of antimony, 8 parts; glue, 3 to 6 parts, weighed dry. The ingredients must be thoroughly mixed, and care must be taken not to mix the chlorate of potash in the dry state with the other materials; it should be mixed first with glue dissolved in warm water. The paste for the rubbing surface may be spread with a brush or spatula on the side of the box.

An Iodine Collodion.

W. M. B. requests us to criticize the following prescription:

Tincture of iodine,
Strong ammonia water,
Collodion, aa.....1 ounce.

Mix. Signa: Paint over seat of pain.

Collodion is incompatible with aqueous fluids, a heavy precipitate being thrown down. Spirit of ammonia should be used in place of the water. The ammonia water in this mixture does not decolorize the iodine. The prescription remains clear but retains the color of iodine.

Cockroach Powder.

W. K. F.—A mixture of the following substances strewed around the places infested will, it is said, drive away the pest: 2 parts naphthalin, 200 parts powdered angelica root, 50 parts melilot, 5 parts oil of eucalyptus.

Good insect powder is recommended. Sulphur is also used.

The subject of ant exterminators was treated at considerable length on page 306 of the July BULLETIN for this year.

Imperial Shampoo.

E. B. wants the formula for Cooban's shampoo.

Several shampoo formulas have been contributed to the BULLETIN by B. S. Cooban, including the following:

Tincture of green soap.....4 fluidounces.
Salts of tartar.....2 drachms.
Oil of bergamot.....20 drops.
Water, enough to make.....2 pints.

Mix and let stand two or three days, then filter.

This is Mr. Cooban's own preparation. He puts it up in six-ounce Paris square bottles with sprinkle tops, and sells it at 35 cents a bottle. The label is lithographed in plain black on a white ground. Tincture of Green Soap (U. S. P.) is used a great deal as a shampoo, diluting it as needed; glycerin may be added if desired.

Vanilla Extract.

C. N. H. asks: "What is the method used by large manufacturers of flavoring extracts for the preparation of a pure vanilla extract?"

Cut the vanilla beans into small pieces and macerate them six months or more in a tank or barrel. Then siphon off the extract and drain the drug. Wash the residue with a menstruum and use this liquid in making the next lot. We have not given a formula since you have asked merely for the method. But if you desire specific information about the strength of the ingredients, consult the official recipe of tincture of vanilla in the Pharmacopœia.

While we do not know of any book devoted to the manufacture of flavoring extracts, any number of recipes can be found in the literature. The Spatula Soda Water Guide gives several formulas of this character, and doubtless others can be found in any of the formula books on the market.

A Difficult Pill.

J. J. B. wants to know how to make a pill of the following formula:

Silver nitrate.....4 grains.
Powdered extract of hyoscyamus....10 grains.
Powdered extract of nux vomica.....4 grains.
Purified ox gall.....20 grains.

Mix and make 20 pills.

First make a mass of the silver nitrate by incorporating it in petrolatum, or better a mixture of petrolatum and paraffin. Then make another mass of the remaining ingredients and incorporate it carefully with the silver nitrate mixture. Avoid the use of water as the silver nitrate is prone to decompose in the presence of moisture, while it should be comparatively unaffected by fats.

An Unsightly Mixture.

A. P. S. wants to know what causes the incompatibility in the following prescription. He complains that it gets soft, turns pink, and finally black in a few hours:

Sodium chloride.....3 drachms.
Sodium bicarbonate.....6 drachms.
Sodium sulphate.....7 drachms.
Sodium salicylate.....½ ounce.
Phenolphthalein.....20 grains.
Oil of gaultheria.....20 drops.
Oil of cinnamon.....10 drops.

Mix and make powder.

The phenolphthalein in contact with sodium bicarbonate gives a pink color, as always happens when this indicator is added to an alkali. The sodium salicylate darkens in the presence of alkali, as does also the cinnamon oil.

Interstate Reciprocity.

F. B.—It would be impracticable to give you a list of the State boards of pharmacy which exchange certificates with the Missouri Board for the reason that many of the boards are constantly changing their rules and regulations. The best thing you can do is to write the secretaries of the boards of those States in which you are particularly interested, and ask them whether or not they exchange with Missouri. You will find a full list of the board secretaries of the country on page 306 of the July BULLETIN.

Worm Powders, Veterinary.

E. C. M.—Here are several formulas for worm powders for veterinary use:

- (1) Santonin10 grains.
Calomel15 grains.
Scammony resin, powdered.....15 grains.
Powdered sugar.....30 grains.

Mix and divide into 15 powders. Give one three times daily on an empty stomach for one day, and repeat in three days if necessary.

- (2) Santonin10 grains.
Podophyllin resin.....4 grains.
Powdered rhubarb.....15 grains.
Sugar of milk.....30 grains.

Mix and divide into 15 powders. Give the powders five hours apart on an empty stomach until three have been given. Omit a day, repeating the dose if necessary.

- (3) Calomel.....3 grains.
Santonin.....¼ grain.
Powdered rhubarb5 grains.

For one powder.

Liquid Wash Bluing.

W. H. W.—Pulverize 8.3 parts of solid indigo in a porcelain dish, and add 33 1/3 parts of sulphuric acid. Let this stand for six hours with frequent stirring with a wooden or glass rod, and pour it into a flask containing one-half gallon of water, not too cold. Drop powdered chalk into the flask until effervescence ceases, in order to remove the sulphuric acid, which is injurious to the clothes. The whole is then allowed to stand quietly for a few days, then filtered through blotting-paper, and can be kept for years without fear of spoiling.

Glycerite of Iron Chloride.

G. V. L. wants a formula for glycerite of iron chloride.

We suggest the following preparation:

- Solution of iron (ferric) chloride.4 fluidrachms.
Citric acid.....80 grains.
Glycerin13 fluidounces.
Ammonia water.....sufficient.
Distilled water, to make.....16 fluidounces.

Mix the solution with the glycerin, dissolve the acid in 1 fluidounce of water, mix the two liquids, and then add ammonia water, gradually, with constant stirring, until the liquid is but feebly acid. The latter will require about 1 fluidounce. Then dilute with water to 16 fluidounces.

If twice as much acid be employed, the liquid will be greenish instead of brown. Each fluidounce of glycerite is equivalent to 1 fluidrachm of tincture of ferric chloride.

Elixir Lactated Pepsin, 80 Grains.

J. K. wants a formula for Elixir Lactated Pepsin, 80 grains.

It is only necessary to use the N. F. formula, making due modification to raise the content of lactated pepsin. The following preparation has 80 grains of lactated pepsin in each fluidounce of elixir:

- Pepsin, U. S. P.....20.5 grains.
Pancreatin, U. S. P.....20.5 grains.
Diastase20.5 grains.
Lactic acid, U. S. P.....11.0 grains.
Hydrochloric acid, U. S. P.....20.5 minims.
Glycerin11 fluidounces.
Water.....5.5 fluidounces.
Tincture cudbear, N. F.....5.25 fluidrachms.
Purified talc, U. S. P.....5.25 drachms.
Aromatic elixir, U. S. P., enough
to make.....32 fluidounces.

Mix the glycerin, water, and the acids; add the pepsin, pancreatin, and diastase, and macerate with occasional shaking until solution is apparently effected. Then add the tincture of cudbear and enough aromatic elixir to make 32 fluidounces. Incorporate the purified talc and filter.

Gasoline Cleaning Liquids.

A. E. M. wants a formula for a "dry" cleaning compound containing gasoline. The following liquids are found in the literature:

- (1) Chloroform.....4 fluidounces.
Ether.....1 fluidounce.
Oil of bergamot.....2 fluidrachms.
Gasoline, to make.....32 fluidounces.
(2) Alcohol5 fluidrachms.
Chloroform5 fluidrachms.
Oil of sassafras.....5 fluidrachms.
Gasoline or benzin.....32 fluidounces.
(3) Ether1 fluidrachm.
Chloroform1 fluidrachm.
Ammonia water.....1 fluidrachm.
Oil of wintergreen.....1 fluidrachm.
Alcohol.....1 fluidounce.
Gasoline, to make.....32 fluidounces.

Marble Polish.

G. L. W.—Mr. W. C. Durkee (Boston) gives the following formula for a marble dressing or polish:

- Pure beeswax.....10 parts.
Japan gold size.....2 parts.
Spirits of turpentine.....88 parts.

The mixture is of creamy consistence, and should be applied in small quantities, with the aid of a piece of white flannel. If it is desired for use upon white marble, white wax may be substituted. The same preparation can be used to advantage on woodwork. The Japan size prevents the stickiness which exists when wax alone is used.

Suppositories Losing Weight.

C. J. H. asks: "Why do suppositories of hydrastine hydrochloride, zinc borate, extract of belladonna, and oil of theobroma lose a half of their weight and volume on standing. Apparently the cacao butter has been dissipated; but the suppositories have not been subjected to special heat at all."

Cacao-butter suppositories made according to the foregoing formula will not decrease in weight unless the wrapped suppositories be exposed to a high temperature. Then part of the melted cacao butter may run out, and the remaining portion assume the shape of the wrapper when the mass becomes cool.

Nail Ointment.

F. M. H. wants a preparation that will stop finger-nails from cracking and splitting.

Try this:

- White petrolatum.....4 ounces av.
White Castile soap, powder.....½ ounce av.
Oil of bergamot or other perfume....sufficient.

This is used for softening the nails, curing hang-nails, etc. It is to be applied at night, the fingers being covered with gloves.

Sodium Silicate or Water-glass.

W. A. M. wants a formula for making sodium silicate, commonly called water-glass, for the preservation of eggs.

Sodium silicate, Na₂SiO₃, is made up by fusing at high heat 100 parts of anhydrous sodium carbonate and 56.6 parts of powdered quartz (SiO₂). By dissolving the mass in water and concentrating, crystals of the salt may be obtained, which when redissolved in water give a solution of so-called water-glass.

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THE MONTH'S HISTORY

WILEY-RUSBY MATTER SETTLED.

Things seem to have been remarkably quiet lately on the pharmaceutical Potomac.

Nothing of any particular importance has transpired to awaken the interest or even disturb the dreams of the drug trade. Of course the event of last month was the annual meeting of the N. A. R. D. at Niagara Falls, and of that convention we are giving an editorial summary on other pages. Outside of this, there has been only the Wiley situation to keep us interested, and even that is not likely to loom very large now for some months until the congressional investigating committee renders its report in December.

So far as the immediate issues are concerned, President Taft settled them by his decision two or three weeks ago. As everybody knows long before this, the President exonerated both Dr. Wiley and Dr. Rusby.

He declared that while the strict letter of the law would have prevented such an agreement as was made with Dr. Rusby, there was abundant precedent in the establishment of the Remsen Board several years ago, not to mention a number of other specific instances. Furthermore, Dr. Wiley was not a party to the letters written by his assistants, Bigelow and Kebler, while Dr. Rusby knew nothing of the legal difficulties connected with his employment. He merely accepted what the government officials offered him. It was their fault, not his—if there were any fault at all.

President Taft, however, suggested that Bigelow and Kebler displayed what he called "over-zeal" in their apparent desire to make the law square with the particular agreement made with Dr. Rusby. The President therefore declared that they should receive a reprimand from Secretary Wilson. Other than this no punishment was meted out to any of the four individuals involved in this nine-day sensation. As a matter of fact, President Taft seemed to look upon the whole imbroglio as being "trivial." He declared that more serious things were uncovered in the congressional investigation, and he intimated that when the Congressional Committee has reported, it may be found necessary to have some sort of a house-cleaning in the Agricultural Department.

* * *

APROPOS OF DR. RUSBY.

This whole situation has been exceedingly unfortunate, particularly so far as Dr. Rusby is concerned. The yearly amount paid to Dr. Rusby was far too small to reward the services of a man of his position and character, and it was the height of injustice to have him subjected to the least criticism for accepting it. The President exonerated him, however, with a fulness which must have given pleasure to all of Dr. Rusby's numerous friends, while very little was said about one other charge made in the original complaint of the Committee on Personnel of the Agricultural Department. Regarding this,

President Taft believed that Dr. Rusby was scarcely justified in having placed on the laborer's pay-roll an expert who could do his work for him during his absence at a small stipend.

Beyond mildly criticizing Dr. Rusby for this, however, President Taft distinctly stated that nothing more should be said and that Dr. Rusby's valuable services should by all means be retained. We venture to believe that even this gentle discipline would not have been meted out to Dr. Rusby if President Taft had known him as well as those of us do who are closer to the man and to his work. Everybody realizes that Dr. Rusby would rather cut off his right hand than do a single thing which would not square with every last principle of honor and duty. In matters of judgment we ourselves are not always able to agree with Dr. Rusby. We have frequently found ourselves opposed to him on one question or another. He is no more infallible than Dr. Wiley or any of the rest of us. But he is square. He is honor itself. We happen to know that time and time again he has made large financial sacrifices in order to be true to his sense of duty to the pharmaceutical profession.

Of course in a congressional investigation, when everybody concerned is jockeying for position, and is trying to get something on the other fellow, things are said and intimated which look bad when subsequently interpreted or misinterpreted in the newspapers. The readers of the daily press may therefore have jumped to wild conclusions regarding Dr. Rusby's connection with the government service. Several acts or alleged acts have now and then been mentioned which could easily be made to look bad when improperly presented to the reading public. But no one who knows Dr. Rusby needs the assurance that the man would never do anything consciously which was in the least degree questionable. His judgment may be fallible, but his character is beyond reproach.

* * *

CONCERNING DR. WILEY.

In all this turmoil over the Wiley incident, indeed, there has been a good deal of misstatement and misunderstanding. So far as Dr. Wiley is concerned, we agree with neither those horrid "interests" which are said to be after his scalp, nor with the hero worshipers

who would make a saint out of their doughty champion. There is no doubt at all that Dr. Wiley is a man of incorruptible honesty. He is a man who has dedicated himself heart and soul to the public health and the public welfare. He never fails to perform his duty as he sees it, and he is willing to make any personal sacrifice, financial or other, to do what his conscience dictates. There are too few of such men in public office, and we would regard it as little less than a calamity if Dr. Wiley were to be removed. The country needs him.

But Dr. Wiley is not without faults. His chief offense is that he believes himself to have a monopoly of the truth, and that any one who disagrees with him is not only wrong but is probably crooked. He is a radical. He has a marked tendency to take extreme, even indefensible positions, and then to impose his judgment on everybody else roughshod. Left alone, he would unwittingly do quite as much harm in some directions as he would intentionally do good in others.

Dr. Wiley's superiors in office have realized this defect in the man and they have sought to correct it. They have endeavored to preserve what is good and to prevent what is bad. Thus President Roosevelt appointed the Remsen Board of expert chemists primarily to investigate the sodium benzoate matter and to see whether Dr. Wiley was right on that question or not. A little later on—perhaps, indeed, it was before that—Secretary Wilson appointed the Board of Food and Drug Inspection in order that all matters having to do with the enforcement of the food and drugs act should be determined by three heads instead of one. Later still President Taft found it necessary to make a personal investigation of the whisky imbroglio, and his decision amounted practically to a reversal of Wiley's dictum.

* * *

THE NUB OF THE QUESTION.

Dr. Wiley, conceiving himself to be right on every question, has, it now seems, bitterly resented all these restrictions on his authority. He practically told the Congressional Committee that the food and drugs act had been nullified because his hands had been tied, and in effect he made a plea for greater and more untrammelled power. It may be that the Committee will recommend some such

change when it reports to Congress next December. We do not know.

At any rate, it is our opinion that Dr. Wiley has been surrounded with checks because his superiors have found them necessary, and not, as the newspapers and popular magazines would have us think, because the "interests" have been camping on his trail. Early in the enforcement of the food and drugs act, while he was still supreme, he made several rules and regulations which have since been flouted by the courts—even by the Supreme Court of the United States. His attitude on the sodium benzoate question was found to be wrong by five able, impartial, and wholly disinterested chemists. His attitude on the whisky matter was reversed by a man of no less character and judicial experience than President Taft himself. It would be a far cry to suggest that these men have represented the "interests."

The truth is, no man in the country is big enough and broad enough to be a dictator. Why do we have a supreme court of nine members, and why do these men so often disagree with one another? No one mind can always find the exact truth, and no single man should be placed in a position of authority where he can impose erroneous judgments on the country. It is no discredit to Dr. Wiley that he has been made to do team work with others. So far as his judgments have been sound, they have undoubtedly been supported by others who have shared authority with him, and it is much better to have an important law enforced by an impartial commission of three or five or seven men than by one man alone. This, it seems to us, is the nub of the whole controversy.

We need Dr. Wiley. He is a man of great zeal and great ability. He ought to be kept in office—and there is little doubt that he will be. But no one, Dr. Wiley or anybody else, ought to be given the rights and privileges of a dictator, and in the enforcement of our laws we should follow the methods of the Supreme Court rather than those of the Russian autocracy.

* * *

BUGABOO OF THE "INTERESTS."

Of course it is true that the "interests" as represented by some of the big food manufacturers have been systematically attempting to discredit Dr. Wiley and if possible to have

him ousted from the government service. They properly look upon him as an enemy, but if their efforts were to succeed it would certainly be a public disgrace. We have no patience at all with their point of view. But nevertheless it is not because of them that Dr. Wiley has been shorn of some of his single-handed authority, nor because of them that the Wiley-Rusby incident developed. The latter seems to have been the result of an inter-departmental warfare—a little inside jealousy. The food manufacturers have seized upon it with avidity, but they were not the cause of it—although we shall be reading in the popular magazines now for several months that they were.

As for the interdepartmental differences disclosed by the Congressional investigation, they are rather serious in character and President Taft pays his compliments to them in the decision rendered in the Wiley case. He intimates that something like a house-cleaning may be necessary in the affairs of the Agricultural Department, and he asserts that he may take some definite action as soon as the Committee has rendered its report to Congress next December. Personal jealousies and bickerings ought not to be permitted, and a harmonious organization should be developed in the interests of public effectiveness.

That there is room for improvement in the machinery of enforcing the food and drugs act we are quite willing to believe, but we hold that the principle should be retained of having all important questions settled by a board or commission of several men instead of by one man.

* * *

**H₂O₂ MAY BE
SOLD BY
ANYBODY.**

We learn from the *National Druggist* that the Ohio Board of Pharmacy recently issued an order prohibiting everybody except licensed pharmacists from selling hydrogen peroxide, on the ground that it was primarily a pharmaceutical preparation. A warning was sent to grocers, department stores and others that if they continued handling the article they would be prosecuted. The merchants, however, protested, insisting that hydrogen peroxide was non-toxic and that the restriction of its sale to druggists would be a hardship upon consumers and an injustice both to them and to general dealers. The board of pharmacy asked the Attorney-General of the

State for an opinion on the law as applying to this article, and he has replied that, under the Ohio pharmacy law, hydrogen peroxide is to be classed as a household remedy, which can be sold by others than registered pharmacists.

This opinion, remarks our contemporary, is in line with a decision rendered by a judge in New York less than a year ago, and confirmed by the Appellate term of the State Supreme Court, in the case of the New York Board of Pharmacy against E. W. Woodworth & Co., a department store firm. In this case the court held that the pharmacy law was in the nature of a police regulation, the primary object of which was to protect the public against incompetence and ignorance in the compounding of medicines which are prescribed by physicians. Hydrogen peroxide, however, was sold in original packages, and in such manner that the public would not be better protected if its sale were confined to pharmacists than when sold by other dealers; and, further, as the article was used for purposes other than medicinal, it did not appear to the court that the sales thereof by others than licensed pharmacists could be prohibited.

Hydrogen peroxide has become an article of such general use by the public, as a disinfectant and for the toilet, and the opinions mentioned above seem to be so strongly fortified, that they may as well be acquiesced in by pharmacists, especially as it is very likely that they will be followed by the legal authorities in other States in which the question may be brought up. The thing for pharmacists to do is to sell a superior product and get the business away from general dealers who handle cheap stuff of very little if any value.

* * *

THE HYDRASTIS AND OPIUM SITUATION.

Golden-seal is becoming very scarce. In their desire to get the drug, diggers have been gathering old roots early in the spring before the new roots for the next year's growth were formed. This resulted in diminishing the normal supply. And unless efforts are made to conserve the plant, the next five years will see an end of golden-seal. Something must be done to correct the prodigal wasteful methods now employed in its collection. The Bureau of Plant Industry in the Department of Agriculture has been making a very energetic attempt to induce people to

start in the cultivation of this expensive drug with seemingly indifferent success. There is no question about the profit in it. The price just now is \$4.25 a pound. Considering the comparative ease of growing golden-seal, the man who owns five acres can profit by planting it. Drug houses who formerly bought golden-seal by the ton to-day entertain offers of 25 pounds. Think of it.

The opium situation is also very tight. The restriction of poppy cultivation in China is having its effect. The Chinese government is curtailing not only the use but the growth of opium. Farmers in China have been forced to reduce their output of opium or even desist entirely from growing the drug. This year the crop is estimated at 3000 cases where the normal supply is 9000. As a result the price is extremely high.

The normal quotation under the present duty, which, by the way, is fifty cents higher than formerly, should be from \$3.65 to \$3.85 a pound for U. S. P. gum. Instead the price is in the neighborhood of eight dollars a pound, and no one knows how high it will soar. Morphine has advanced over a third. Codeine has advanced a half. Fluid extracts, tinctures, and all opium products have increased. This is owing to no speculative interference. The advance is due to natural causes. But should a speculative element enter into the opium trade, there is no telling where the price will go. The market quotation is already the highest in thirty years. Unfortunately the yield, already small, has not been conserved entirely for medicinal use. Large quantities of opium are being smuggled into China for illegitimate sale to habitués of the drug.

Then, too, Turkey has had the severest winter in its history. It wrought havoc with the opium crop, killing two-thirds of the plants. Poppy cultivation is very delicate. The plant is so easily affected. It is sown in the fall and a drought or hard dry spell following the sowing prevents the plant from getting a rooting that will sustain it through the winter. Then, again, a hard frost before snow covers the ground is fatal. And when spring comes if a dry season prevails the crop is affected 50 per cent. Worst of all, if it rains when the juice is being gathered, much is washed away. Thus it is seen that from the sowing till the gathering, the opium plant

has one continual struggle for life. And during the past year it has had an unusually precarious existence with a consequent diminution in the crop.

* * *

THE PUBLIC DRINKING CUP.

The movement against the public drinking cup is growing rapidly. Laws were enacted in several States during the past winter, and the Illinois statute is a fair example of the others. This prohibits the use of common drinking cups in schools, public halls, hotels, lodging houses, theaters, factories and State or municipal buildings. The Attorney-General has ruled that cups may still be legally used in places not specifically mentioned in the law—banks, barber-shops, saloons, stores, restaurants, public parks, factories, etc.

In some of the city ordinances and State laws the list of interdicted places is more lengthy, and in any event it is the duty of everybody to fall in line with a movement of this kind which means so much to the public health. For there is no doubt that the most serious diseases are spread by the use of the public drinking cup. So thoroughly is this realized by those who have studied the question that in a few years we may expect to see people shunning a common drinking cup as they would the plague.

Already the public has been pretty well educated by the installation of sanitary drinking fountains in most of the public parks throughout the country—those ingenious spouting contrivances which throw a jet of water up into the air so that one with a little practice may catch it in his mouth without the necessity of using a cup at all. Many druggists have seized upon the opportunity to sell aseptic paper cups, and the Editor of the BULLETIN, while traveling through the East this summer, found himself able to purchase these cups at several pharmacies. They are inexpensive, very convenient, folding in character, and any druggist can work up a nice sale on them with a little care and attention.

* * *

DEATH OF LOUIS ROSENHEIN.

Most unfortunate was the sudden death last month of Mr. Louis Rosenhein, the secretary and treasurer of the Live and Let Live Drug Co. of Chattanooga. Mr. Rosenhein had been suffering from a valvular heart trouble for several years, but the startling

suddenness of his death was none the less grievous. He had been at the store nearly all day. At 10 o'clock in the evening he stepped out of a cab, was suddenly seen to stagger, entered the store with difficulty, and was assisted by one of his clerks into the rear room. A physician was at once sent for, but death resulted before he could reach the store. Every employee of the company was unnerved by the incident, for each of them held Mr. Rosenhein in profound regard and respect. Born in Hungary in 1864, he had come to America at an early age, and had made himself a very able and successful business man. He had been secretary and treasurer of the Live and Let Live Drug Co. for about fifteen years.

* * *

PHILADELPHIA AGAIN.

Another mild sensation broke out in Philadelphia not long ago. We have grown accustomed to look to the Pennsylvania Board of Pharmacy for something dramatic when things get quiet elsewhere. This time the Board has caused the arrest of a number of paint dealers in Philadelphia on the charge of selling poisons without complying with the provisions of the pharmacy act and similar statutes. Something like 50 or 75 of these men have been jumped on. Of course they are angry and they have threatened reprisal. They look upon this as an attempt of the drug trade to wreak vengeance upon them for their competition in the sale of chemicals, and they have threatened to get square. It was rumored some time ago that they had even employed a detective to get something on the druggists. The Philadelphia Association of Retail Druggists thereupon concluded that the pharmaceutical house ought to be put in order, and so a warning was sent out to every member to respect the poison, anti-narcotic, and carbolic acid laws to the very letter.

* * *

PRESCRIPTIONS A CURIOSITY!

It has from time to time been asserted by druggists that the prescription business is largely getting to be a thing of the past. Most of our readers, however, will hardly be prepared for the conditions as they apparently exist in Denver. At the Boston meeting of the A. Ph. A. in August a paper was presented by Chas. M. Ford, the well-known druggist of Denver, and at the present time the drug inspector of the State. Mr.

Ford declared that there were fifty drug stores in Denver, and two hundred and eleven persons employed in them, of whom eighty-four were registered pharmacists. In these fifty stores there were only three hundred and four prescriptions dispensed daily on an average. This left out of account, however, a group of five or six stores under one management which were said to do a large prescription business. Mr. Ford thought that the three hundred and four prescriptions dispensed in the fifty stores mentioned in the paper, could easily be compounded in ten stores with much greater economy of effort. This prescription showing for Denver is certainly a poor one, and it is interesting to note that Mr. Ford largely ascribed the conditions to the growth of osteopathy, Christian Science, and other cults dealing in drugless measures.

* * *

CO-OPERATION IN CINCINNATI.

A novel scheme of coöperative advertising and selling has been worked out among fifty or more druggists in Cincinnati. In order to compete with the big down-town dealers these men have decided to carry on an aggressive advertising campaign. They purchase space in one or more of the leading dailies and on Saturdays offer cut prices on seasonable goods and sundries. At the bottom of each ad. is a list of the druggists represented in the group. They call themselves the "Economy Drug Stores," and "Economy" signs are used inside and outside of every establishment in order to connect the stores with the advertising. The electric signs outside are gold lettered and are 3 by 8 feet in size. The whole scheme is certainly novel, and it will be exceedingly interesting to see how it works out.

* * *

NO CHAIN-STORES FOR CHICAGO?

We learn from the *N. A. R. D. Notes* that one of the eastern chain-store syndicates has recently been considering the advisability of establishing a group of stores in Chicago. A representative looked over the ground, inserted a few newspaper advertisements in search of store managers, collected data of one kind and another, and then decided to abandon the scheme. The *Notes* says that the easterners found the drug trade of Chicago so well organized as to make the city an unpromising field.

EDITORIAL

THE MICHIGAN POISON CORK LAW AND ITS COMPLICATIONS.

The drug trade of Michigan is very much disturbed over a law which was juggled through the Michigan legislature last winter, and which no one knew anything about until the mischief had been done. It declares that all containers with poisons in them must be provided with serrated corks approved by the State Board of Health. Similiar measures are introduced from time to time in the different legislatures, and it behooves pharmacists to be on the lookout for them. Several made their appearance last winter, but all of them except the Michigan bill were discovered in time and were given their quietus. Apparently the "interests" behind these measures are the manufacturers of the serrated corks themselves, and they seem to be adepts in gum-shoe methods, for no one in the drug trade knew anything of the Michigan bill until a week or two after the legislature had adjourned and the governor had signed the law.

Here is the Michigan bill in its entirety:

SECTION 1. It shall be unlawful after November first, Anno Domini nineteen hundred eleven, for any person, firm, or corporation doing a retail or wholesale business, or any agent, clerk or employee, to sell or dispose of, or offer to sell or deliver to any person any poison or any substance generally denominated as poisonous, unless the cork or stopper of the bottle or receptacle containing such poison or poisonous substance shall have fitted thereon a wood, celluloid, glass or metal disc, with serrated edge sufficient to call attention to the fact, either in daylight or in darkness, that the contents of the bottle or receptacle, the stopper or cork of which is fitted with such device, contains a poison or poisonous substance. The words "poison" or "poisonous substance" as used in this act shall be construed to include only the poisons or poisonous substances referred to and included within the terms of the schedules and language of section twenty-three of act number three hundred thirty-two of the public acts of nineteen hundred five. It shall be the duty of the State Board of Health, within thirty days after this act shall take effect, to approve of such a device or appliance as shall meet the requirements of this act and a sample thereof shall be kept in its office in the city of Lansing. The said State Board of Health shall immediately after the approval of such device or appliance, forward to every wholesale or retail druggist in this State, or to any other person upon request, a sample of the device or appliance so approved. The cost of all samples of such devices and appliances so approved by the State Board of Health, and by this act required to be furnished or issued by the State Board of Health, together with the cost of

delivering same, shall be paid by the Board of State Auditors out of the general fund in the State treasury, on presentation of vouchers approved by the secretary of the State Board of Health. It shall be unlawful for any person, firm or corporation, or employee, agent or clerk, to use, authorize or cause to be used upon such cork or stopper any appliance or device unless same has received the approval of the State Board of Health, or to use, authorize or cause to be used any such appliance or device above mentioned on any other bottle or receptacle than those hereinabove provided for. Any person violating the provisions of this act shall upon conviction thereof be punished by imprisonment not less than three months nor more than one year, or by a fine not less than ninety dollars, or not to exceed three hundred dollars, or both such fine and imprisonment in the discretion of the court: Provided, That each such sale or delivery contrary to the provisions of this act, shall constitute a separate offense: Provided, That nothing in this act shall apply to poisons sold in packages or receptacles not fitted with a cork or stopper.

It will be seen that the substances to be considered as poisons under this law are those mentioned in Schedules A and B of the pharmacy act. Section 23 of this act reads as follows:

SEC. 23. It shall be unlawful for any person or persons licensed under the provisions of this act to sell at retail or furnish any of the poisons named in the schedules hereinafter set forth without affixing or causing to be affixed to the bottle, box, vessel or package a label containing the name of the article and the word poison distinctly shown, together with the name and place of business of the seller all printed in red ink, and the name of such poison printed or written thereupon in plain legible characters, except when sold in the original package of the manufacturer, which conform to the requirements for the wholesale dealers, as hereinafter set forth. The following are the schedules:

SCHEDULE "A."

Arsenic, cyanide of potassium, hydrocyanic acid, strychnine, and all poisonous alkaloids and their salts, oil of bitter almonds containing hydrocyanic acid, opium and its preparations, except paregoric and such others as contain less than two grains of opium to the ounce.

SCHEDULE "B."

Aconite, belladonna, cantharides, colchicum, conium, cotton root, digitalis, ergot, hellebore, henbane, phyto-lacca, strophanthus, oil of tansy, veratrum viride and other pharmaceutical preparations, arsenical solutions, carbolic acid, choral hydrate, chloroform, corrosive sublimate, creosote, croton oil, mineral acids, oxalic acid, Paris green, salts of lead, salts of zinc, white hellebore, or any drug, chemical or preparation which, according to standard works on medicine or materia medica, is liable to be destructive to adult human life in quantities of sixty grains or less.

It would seem from the first sentence of the new cork law that retailers and wholesalers are affected. Manufacturers apparently are

not involved, and there seems little reason why jobbers should be. Very few of the poisons sold by jobbers to the retail trade are passed along to the consumer in original packages, so that little is to be gained by insisting that the jobber observe such a law. If he is made to do it, and if he must restopper, for instance, every eighth-ounce bottle of morphine which he receives from the manufacturing chemist, he is going to be subjected to a tremendous amount of annoyance for which there is no warrant at all. Furthermore, if the jobber breaks open such a package, and puts in a cork of his own, is the retailer going to be satisfied that he is getting the Simon pure chemical turned out in the first instance by the manufacturer?

It is possible that this bill, annoying and unnecessary as it is, may not cause the retailer any particular hardship or inconvenience. Whenever he sells two or three ounces of carbolic acid, he must put the substance in a bottle and provide the bottle with a cork. To conform to the law he need only in addition slip over the cork one of the two serrated contrivances which have been approved by the State Board of Health. But it is an entirely different problem with the jobber. Thousands of packages in his stock are affected, and if he is made to provide them all with such corks he will be subjected to an amount of red tape which is simply stupendous. Even the jobbers of Chicago are worried over the bill. Technically it does not affect them, since their shipments into Michigan territory come under the head of interstate commerce not reached by any State act, but in practice they fear the Michigan retailers will not buy poisons of them in competition with the local wholesalers unless the packages are provided with the approved corks.

A. L. Walker, a well-known retailer and student of pharmaceutical legislation, believes that there is a loophole in the law which will permit the jobber to escape. The second sentence of the act reads as follows: "The words 'poison' or 'poisonous substances' as used in this act shall be construed to include only the poisons or poisonous substances referred to and included *within the terms of the schedules and language* of section twenty-three of act number three hundred thirty-two of the public acts of nineteen hundred five." Turning now to the "terms" and "language"

of section twenty-three of the latter act, we find that original packages of the manufacturer are not involved, and Mr. Walker holds that this exemption applies as much to the cork law as it does to the poison law. He believes that the packages which escape the labeling provisions must also escape the cork provision, since reference is made in the cork law "to the *terms* of the schedule and *language* of section twenty-three." This is a fine point in law, and it remains to be seen whether it will be supported or not. The Attorney-General of the State is on record to the contrary. Of course if original packages are exempt, the jobber is practically outside the law, for he deals in original packages for the most part.

The statute will undoubtedly be repealed at the next session of the State legislature, but this can unfortunately not result yet for a year and a half, and in the meantime the retailers and jobbers of Michigan are deserving of much sympathy.

PHYSICIANS AND THE ANTI-NARCOTIC LAWS.

We have had more or less to say in this journal about the relations of physicians to the anti-narcotic laws of the different States. It has frequently been asserted by others that these laws could be practically nullified by the illegitimate acts of physicians in prescribing narcotics *ad libitum*. But we have always striven to show that physicians could be punished for this sort of thing just as much as pharmacists could for open violations of the law. Quite often we have cited instances where physicians have been convicted. Several cases of this character are now pending in Pennsylvania, and in particular one case in Philadelphia has attracted a good deal of attention.

We observe that out in California the State Board of Pharmacy is getting after two physicians pretty vigorously. The California statute contains the customary provision prohibiting physicians and dentists from prescribing narcotics for the use of habitués, and because the Board is enforcing this section of the law a good deal of protest has apparently resulted from some members of the medical profession. The *California State Journal of Medicine*, however, which is the official organ

of the State Medical Society, strongly takes its stand in support of the Board of Pharmacy. The *Journal* declares that one licensed physician in the State, and a member of his county medical society, has been found to be signing narcotic prescriptions in blank and leaving them at some drug store so that the pharmacist could fill them out at will and thus make a show at conforming to the law. Proceedings have been brought against several physicians, and in most instances the latter have pleaded guilty and paid fines.

It is more or less common for a conscienceless physician to work in league with an equally conscienceless druggist to defeat the anti-narcotic law, but the State Board of Pharmacy in California is showing that this sort of thing won't wash. More power to its elbow!

PROFITS AND EARNINGS

AN ASTONISHING RATE OF PROFIT.

We have received from a druggist who signs himself "Minnesota" the following annual statement of his business, requesting that we analyze and comment upon it:

Cash sales.....	\$7596 70
Book accounts—all good.....	515 96
Goods purchased.....	4190 19
Expenses	1136 97
Cash discounts.....	73 71
Bills payable.....	355 47
Proprietor drew from business....	2246 95
Cash on hand, 1-1-11.....	70 25
Cash in bank, 1-1-11.....	493 70
Stock on hand, 1-1-11.....	2861 04
Fixtures (new), 1-1-11.....	1210 89
Cash on hand and in bank, 1-1-10..	282 39
Stock on hand, 1-1-10.....	1780 66
Fixtures on hand, 1-1-10.....	1193 18

In addition to the foregoing statement I may say that there were no bills payable or receivable on January 1, 1910, at the beginning of the year. Of the amount I drew from the business, \$500 was taken for an outside investment. The expenses included everything, even to freight and drayage, but not my salary as proprietor. The fixture item represents show-cases, counters, shelf bottles, utensils, etc., but not shelving, which belongs to the owner of the building. I dispensed 4518 prescriptions and received \$2110.70 for them.

MINNESOTA.

This statement is peculiar as indicating an enormous gross and net profit. Let us find

out what these respective figures are by analyzing the different items.

Stock inventory January 1, 11.....	\$2861 04
Stock inventory January 1, 10.....	1780 66
Increase in stock inventory.....	\$1080 38
Purchases	\$4190 19
Goods unsold.....	1080 38
Cost of goods sold during year.....	\$3109 81
Total cash and credit sales.....	\$8112 66
Cost of goods.....	3109 81
Gross profit.....	\$5002 85

A gross profit of \$5000 on a business of \$8000 is certainly remarkable. This means a percentage of gross profit amounting to 61½! The average, mind you, is 40 per cent, and a pretty good average it is, too. Any man who can make 61 per cent on his sales is beyond us. He certainly must get beautiful prices!

The expenses are given as \$1136.97, but inasmuch as these do not include the proprietor's salary, we have assumed this to be \$1000, and have therefore arrived at a total expense of \$2136.97. Dividing this amount by the sales, we have a percentage expense of about 28. Subtracting the percentage of expense from the percentage of gross profit, we have left a percentage of net profit amounting to 35. This, we repeat, is astonishing. It is more like the average gross profit than a net profit, and we can only assume that "Minnesota" must be a twentieth century wizard of some kind.

We looked first for a mistake in the figures somewhere, and we do find that "Minnesota" shows a smaller profit in actual assets than the foregoing analysis would indicate. Here is what his statement shows him to have made from the business:

Amount drawn during the year.....	\$2246 95
Increase in stock inventory.....	1080.38
Increase in fixture inventory.....	12 71
Increase in cash.....	281 56
Total	\$3621 60
Bills payable	355 47
Actual income from the business.....	\$2266 13

This is what he seems actually to have made from the business, but in analyzing the profits as we have done earlier in these comments, we seem to have the following income:

Net profits.....	\$2865 88
Salary	1000 00
Total income.....	\$3865 88

Here is a difference of about \$600, and apparently "Minnesota" has made this much less than he thinks he has.

We took off nothing for depreciation on either fixtures, book accounts, or stock. If this had been done, it would cut down the total income somewhat, though not materially. The degree of profit gotten by "Minnesota" from his business seems astonishing from any point of view.

A PROFITABLE LITTLE BUSINESS.

A South Dakota druggist, desiring to have us comment on his business, submits the following statement:

Inventory Jan. 1, 1910.....	\$2,649 00
Inventory Jan. 1, 1911.....	2,712 00
Business done	6,441 95
Expenses, not counting salary.....	566 12
Salary	950 00
Investments made with store's receipts..	898 41
Clerk hire for soda fountain in April...	75 00
Discounts	68 00

This druggist is located in a town of 400 people. He owns the building and lives back of the store. He says he counts as rent the interest on his money invested in buildings, plus the taxes, insurance, repairs, etc. His credit accounts are small as he tries to collect everything by January 1.

The stock increased \$63 during 1910, as may be seen from the difference in the inventory showings at the beginning and end of the year. Adding to this increase an investment of \$898.41, we get an apparent net profit of \$961.41.

Adding the expenses, \$556.12, to the salary, \$950, plus \$75 for clerk hire, we obtain total expenses of \$1581.12.

The year's purchases are not given, and to arrive at the gross profits we must therefore add the expenses, \$1581.12, to the net profits, \$961.41, which equals \$2542.53. Subtracting this sum from the total sales, \$6441.95, we find the purchases to have been \$3899.42.

Dividing the net profits by the sales we find the percentage to be 14.95, a good showing. The gross profit, obtained likewise by dividing by the sales, is 39.4 per cent. The percentage of expense is 24.54, obtained by dividing \$1581.12 by the sales of \$6441.95.

THE HALL OF FAME

PROFESSOR LLOYD OFFERED THE MAYORALTY.

Prof. John Uri Lloyd was recently offered the mayoralty of Cincinnati under conditions which will prove very interesting to his numerous friends in American pharmacy. Last winter the Professor was a member of the



JOHN URI LLOYD

Grand Jury of Cincinnati which exposed political corruption so effectively, and which returned a number of indictments against public officials of one character and another. The people of the city were anxious to have this reform movement kept up, and it was only a sequel of the situation that a committee called upon Professor Lloyd at the Lloyd Library a month or two ago and practically offered him the mayoralty of Cincinnati on a silver platter.

The committee was made up of members of all parties. They offered Professor Lloyd the nomination in the name of the Democratic party, but that was because his allegiance had usually been to the Democracy. He was assured that if he would accept the nomination, practically all other candidates would withdraw in his favor. The committee felt unanimously that Professor Lloyd, not only because of his fearless work on the Grand Jury, but also because of his quarter-century of activity in the interests of civic betterment,

was admirably qualified for the position of political leader in the community.

Professor Lloyd's friends in pharmacy will be interested to know that his reason for declining the nomination was the fear that, if he should enter politics at this time, he would find the rest of his life practically devoted to public work, with the result that his life efforts in behalf of pharmacy would have to come practically to an end. He felt that while others could be secured to serve the public of Cincinnati, no one could as easily be found to do the peculiar work he is rendering in behalf of American pharmacy. Therefore he put personal opportunity behind him and refused the crown.

ONE OF THE A. PH. A. PRESIDENTIAL NOMINEES.

At the Boston meeting of the A. Ph. A. three men were nominated in the customary manner for election to the presidency of the organization. These men were Charles Holzhauser of Newark, N. J., Prof. Wm. B. Day of Chicago, and William Mittelbach of Boonville, Mo. We were able to print portraits of the last two nominees in connection with our



CHARLES HOLZHAUSER.

editorial summary of the Boston meeting in the September BULLETIN. The picture of Mr. Holzhauser, however, did not reach us in time for this purpose, and we are therefore publishing it this month. Mr. Holzhauser is the proprietor of a very successful and long established pharmacy at 787 Broad

St., Newark, and he has been a regular attendant upon the meetings of the A. Ph. A. for many years. These three nominees will be voted upon in the customary manner by mail some time during the next two or three months.

THE NEW DEAN IN CLEVELAND.

In the BULLETIN of last month we made some editorial reference to the appointment of Dr. Norman A. Dubois as Dean of the Cleveland School of Pharmacy, to succeed Professor Army, who had been taken to New York to fill the place left vacant by the resignation of Professor Coblenz. We were unable last month, however, to print Dr. Dubois' portrait, and we are grasping the occasion to correct the omission in this issue of the BUL-



DR. NORMAN A. DUBOIS.

LETIN. Dr. Dubois was present at the Boston meeting of the A. Ph. A. in August and gave the members a chance to see what the new Dean looks like.

A VICTORIOUS GIRL.

A surprising achievement was registered by a young woman at the last commencement of the Albany College of Pharmacy. Four prizes were awarded on that occasion to members of the senior class, and Helen F. Sheehy of Little Falls, New York, figured in all four instances. She won two of the prizes, and she received first honorable mention in the other two cases. Prizes were awarded her for

passing the best senior examinations in all branches, and also for doing the best senior work in chemistry. The honorable mentions were secured with reference to the prizes



HELEN F. SHEEHY.

awarded for the best senior work in pharmacy and for the best senior work in materia medica. There is no telling what Miss Sheehy would have done if the list of prizes had been larger. Apparently she was determined either to get the first or second prize in every event, no matter how many there were! And it would seem that she made the young men in the class sit up and take notice! Miss Sheehy has been connected with the firm of O'Rourke & Hurley in Little Falls for the past five years, and since her graduation from the Albany College she has been employed by the same firm as licensed pharmacist.

SOMETHING DOING IN CALIFORNIA.

Mr. Carson Angel, one of the hustling representatives of Parke, Davis & Company on the Pacific Coast, has just been appointed by President Lichthardt of the California Pharmaceutical Association as chairman of the Traveling Men's Auxiliary. It will presumably be Mr. Angel's duty to make arrangements for next year's convention at Del Monte, and no one who knows Mr. Angel doubts that the work will be well done. Some novel features are under contemplation, and Mr. Angel and the other members of his committee will undoubtedly see to it that something new is pulled off next year.



This pharmacy, shown on page 318 of the August BULLETIN, was asserted to be that of Martin E. Luther, of Kalamazoo, Mich. As a matter of fact, however, it belongs to F. L. Vilas, of Pierre, S. D.



Another error was made in the August issue in mentioning the Earl Drug Company, of Ridgway, Pa., as the proprietors of this establishment. On the contrary, this is the store owned by Martin E. Luther, of Kalamazoo, Mich.



This is another view of Mr. Luther's pharmacy in Kalamazoo. The fixtures were furnished by the Wilmarth Show Case Co., and the fountain by the D. Karle Company.



Here we have the drug store of the Thompson & Ford Lumber Co., of Grayburg, Texas. It is located in a thriving region and does a hustling business.



E. M. Kay, 71st and Euclid Ave., Chicago, is the proprietor of this establishment. The location is in the extreme southern part of the city called Bryn Mawr.



This is another view of Mr. Kay's pharmacy in Bryn Mawr, Chicago. Mr. Kay evidently makes specialties of stationery, souvenir post-cards, and a circulating library.

Drug Stores Here and There.



K. E. Anderson, Ph.G., is the proprietor of this store in Glasgow, Mont. Mr. Anderson himself is shown at the left of the picture, while the man at the right is his clerk, W. C. Arendsen.



Here we have another view of Mr. Anderson's store in Glasgow, Mont. Judging both from this picture and the preceding one, Mr. Anderson does a lively soda business and is equipped to handle it.



This is the store of G. R. Thomason, which is located in Stockton, Kansas. Mr. Thomason is presumably the man standing behind the cash register—a very suggestive position for a druggist to be in!



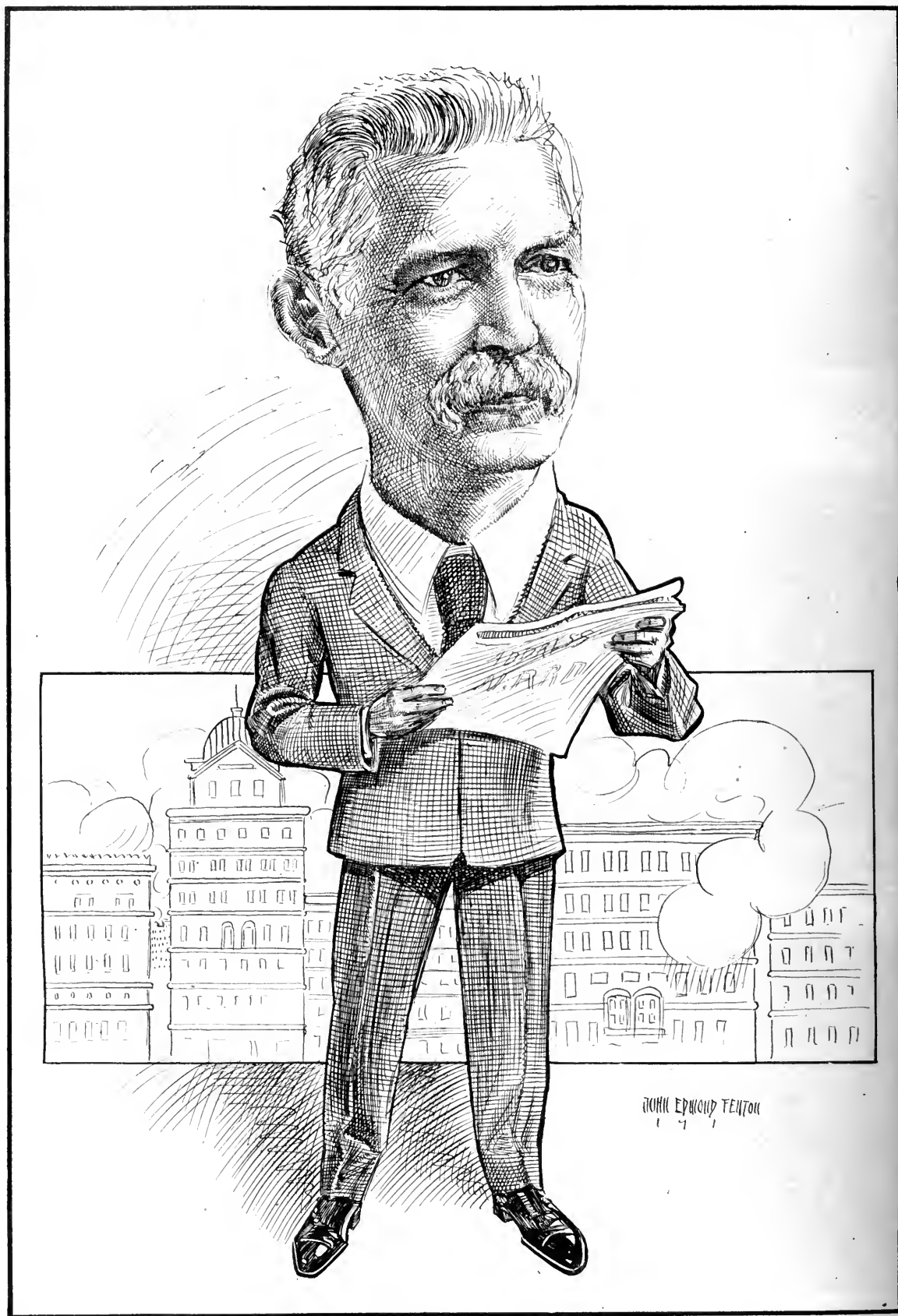
This somewhat unique establishment is that of A. Ditrapani, president this year of the Louisiana State Pharmaceutical Association. The location is in the residential section of New Orleans, La.



A. L. Richey is the proprietor of the Richey Drug Company, located at the corner of Winter and Emerson Streets in Haverhill, Mass. Mr. Richey and his staff are here shown.



C. W. Terry, M.Ph., is dispensing a prescription for the Adams Drug Co., of Forney, Texas. Mr. Terry is a graduate of the Tulane School of Pharmacy, class of 1901.



Thomas S. Armstrong of New Jersey,

A sincere, courageous, warm-hearted leader of the N. A. R. D. who always talks to the point and who has taken the floor in many a hot argument.



The N. A. R. D. at Niagara Falls.

THE N. A. R. D. CONVENTION AT NIAGARA FALLS.

**The Organization in a Flourishing Condition—\$20,000 in the Treasury and the Sum Increasing—Looking to New Fields of Activity—A Greater Legal Department Contemplated to Give Free Counsel to State Bodies and Individual Members—Appointment of Salaried Telephone Representative Who Will Travel in the Interests of Retailers—Important Legislation Discussed, Including the Sherley Bill, the Parcels Post, and the Proposed Department of Public Health—The Wiley Entanglement Avoided—Measures Taken to Insure Price Protection—
H. C. Shuptrine Elected President and Chas. H. Huhn
Chairman of the Executive Committee.**

The roar of the cataract flowing over Niagara Falls could hardly be used to indicate the character of the N. A. R. D. convention held there last month. Those who looked for excitement were doomed to disappointment. Save for an occasional outburst on

and the despatch with which he ran the proceedings did much to sustain the interest of the members that might otherwise have flagged. For there was nothing of a stirring nature to engross their attention.

THE ILLNESS OF ERRANT AND MUIR.

The convention opened inauspiciously. Judge Errant had just suffered an attack of apoplexy and lay unconscious in Chicago during the meeting—a fact which threw a sort of pall over the assembly. The legislative conference was in a way the main event of the convention. Since this centered about Judge Errant, it looked as though his loss were all but irreparable. As Mr. Mann said before the assembly, just when the association was about to organize a greater legal department, Judge Errant, upon whom so much depended, had been stricken down. A new man in the work must begin all over again. Let us hope that time will restore the



Joseph W. Errant, General Counsel, stricken with apoplexy shortly before the convention started.

the part of a single individual, the meeting was a comparatively placid affair. But while there were no startling developments, nothing new or sensational, one could discern beneath the calm surface of the proceedings a heavy undercurrent of work being done. In their quiet way the members of the Committee on Resolutions were exerting themselves to the utmost. They thought nothing of staying up till two in the morning molding into acceptable shape the various recommendations made in the sessions. The Resolutions Committee appeared to be the great hopper into which all projects of importance were dumped to be threshed out and offered later in the form of formal resolutions. And this year the members did yeoman service.

President Guilford presided beautifully. While he had never offered any pretensions as a parliamentarian, his natural executive ability made itself felt in the chair. At every turn he expedited the work of the convention,



Dr. William Muir, of Brooklyn, stricken with a serious illness as he was about to leave for the convention.

Judge to his former activities. Frank H. Freericks took the chair in the absence of Judge Errant and guided the conference very creditably. Another prominent member, Dr. William Muir of Brooklyn, had been stricken with what was said to be a fatal illness just

as he was leaving for Niagara. Thus fate was unkind to the convention at the start.

But whatever be the personal losses sustained by the association during the past year, in a material way it was never so prosperous. There is \$20,000 in the treasury. A nice sum! It certainly ought to keep the association out of want. If the fund continues to swell as we expect, the N. A. R. D. will soon be a wealthy organization.

THE PRESIDENTIAL CONTEST.

President-elect Shuptrine enters his* term of office under pleasant circumstances. At first it looked



President-elect H. C. Shuptrine, of Savannah, Georgia.

as though there would be a contest over the presidency with more or less feeling prevalent in the two opposing factions. Henry W. Merritt represented the A. D. S. party, while Herman C. Shuptrine was spoken of as an independent candidate. But soon it developed that both men were A. D. S. members, the only difference being that Merritt was considered radical while Shuptrine maintained an independent attitude. Shuptrine was ultimately elected by acclamation. When he was about to take the platform to accept the office, President Guilford had the diplomacy to ask Merritt, the defeated candidate, to lead Shuptrine to the chair. This he did with rare grace. In a warm and eulogistic speech he congratulated Mr. Shuptrine on his election, showing that he nursed no grudge over his defeat and throwing all his personal influence to the support of his successful opponent. It was a very generous and magnanimous thing to do and contributed decidedly to the harmony of the meeting.

PROPOSED FEDERATION OF THE A. PH. A. AND THE N. A. R. D.

Prof. James H. Beal extended greetings from the A. Ph. A. in much the same way that Mr. Guilford had conveyed to that body assembled in Boston the good wishes of the N. A. R. D. Professor Beal spoke of the fraternal spirit existing between the two organizations. Both have the same end in view, he said, although they functionate in different ways. Without the

attention that the scientific side of pharmacy receives from the A. Ph. A. there would be no State board examination, and without the support of the N. A. R. D., efforts to improve trade conditions in the drug business would meet with little success. Professor Beal went on to dwell on the organic relationship between the two bodies. "What helps one," he said, "benefits the other. What hinders one hurts the other."

Because of this close relationship between the two, it has frequently been suggested that they be federated. This was discussed at the A. Ph. A. meeting in Boston. If it means that either of the two is to lose its identity, then both would suffer by the merger, contended Professor Beal. Both the scientific and commercial sides of pharmacy require the efforts of organized bodies. An association must specialize either in the scientific functions of pharmacy on the one hand or trade questions on the other. Both interests could hardly be served by one body. Professor Beal believes in promoting a better understanding and coöperation between the two associations, while each retains its individuality. If a proposition runs the gauntlet of the A. Ph. A. it is pharmaceutically correct. If it later receives the approval of the N. A. R. D. then it must be entirely satisfactory.

INTERSTATE ANTI-NARCOTIC LEGISLATION.

Among the legislative efforts of a constructive nature is a movement to secure a Federal law for the suppression of illicit traffic in habit-forming drugs. There are now on the statute books in many States laws forbidding the sale of opium, cocaine and morphine, but there



Henry W. Merritt, a cheerful loser. He graciously introduced his successful rival to the convention.

is no National law which prevents or prohibits interstate traffic in these drugs. There is nothing on the books, for instance, which prevents the shipment of these drugs from a point in New Jersey to a place in any other State, and this is what the association is aiming at. In this connection the convention had hoped to receive a talk from Dr. Hamilton Wright, of Washing-

ton, D. C., Commissioner of Opium Traffic, United States Department of State at Washington, but he was unable to be present.

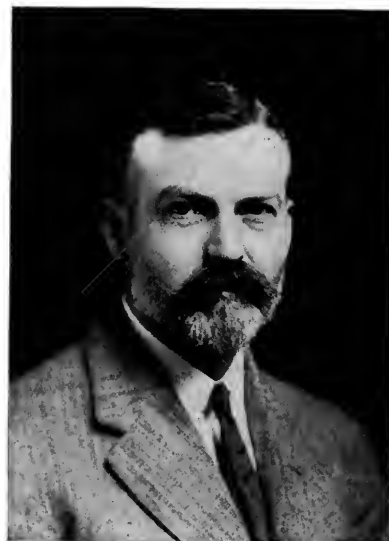
The transportation of narcotic drugs in interstate commerce without let or hindrance has handicapped many States which have most admirable intrastate laws for controlling the traffic in these drugs. As John C. Wallace of Pennsylvania said: "Interstate laws without intrastate laws are valueless, and vice versa." President Taft in his special message to Congress had requested that a suitable law be passed to regulate the sale of narcotics. The N. A. R. D. went on record again as opposed to the indiscriminate sale and transportation of these abominable narcotic and habit-forming drugs. Several foreign countries are also opposed to it. Even China, which derived great revenue from these drugs, is restricting all production of opium. The movement appears to be world-wide.

It was felt, therefore, that the passage of an anti-narcotic law with proper restrictions would not only rid this country of illicit dealers in the nefarious traffic, but would also place the medical and pharmaceutical professions on a higher plane. The association favors interstate anti-narcotic legislation that will prohibit all illegitimate traffic in narcotics and habit-forming drugs, confine their sales to proper channels, and their uses to strictly medicinal purposes.

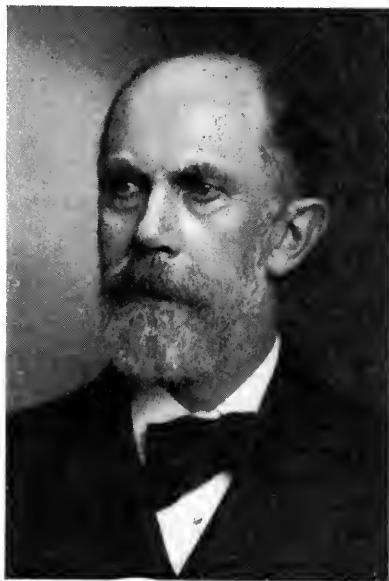
THE TELEPHONE SITUATION.

The association is making a fight to obtain for druggists their fair share of telephone earnings. The druggists of Chicago alone have made several million dollars by proper attention to the telephone business. And

mann, chairman of the Telephone Committee, cited a few instances to the point. Baltimore with 350 druggists suffered all kinds of trying conditions in the telephone service. Some were paying a large rental while deriving little income from the telephone. Others were getting a small percentage of the earnings. Through the good work of the N. A. R. D. Mr. Bodemann got the local committee together and after several meetings with the telephone company, slot machines were in-



Charles F. Mann, who retired from the chairmanship of the Executive Committee after several years of service, and who is to be presented with a gift on behalf of the members.



Wilhelm Bodemann, Chairman of the Telephone Committee, at whose suggestion a telephone expert is to be employed.

stalled in every drug store. After a few more meetings the committee succeeded in obtaining 20 per cent on all the money taken in.

Again in Kansas City a few years ago, the Bell Telephone Co., which enjoyed a monopoly on the telephone privileges, demanded unreasonable rates from the druggist. It happened at the time that an independent company was looking for a foothold and the druggists took it upon themselves to support the latter concern and throw out the Bell 'phones. After one year, the subscribers of the independent company succeeded those of the Bell, and it is generally conceded that it was the druggist who made this possible.

Mr. Bodemann showed a feeling of vigorous resentment against druggists who are holding out against mutual telephone agreements. He recommended the hiring of a capable solicitor to look after the telephone situation. And it was at the instigation of Mr. Bodemann that the Executive Committee was instructed to utilize the services of at least one organizer for special work to improve conditions in the retail drug business in the matter of telephone service and commissions. What is wanted is an upward, not a downward, revision of the telephone commission tariff. The usual commission allowed retail druggists on their telephone is 40 per cent on city messages and 20 per cent on outside tolls. This is only a fair compensation to the retail druggist considering the fact that he furnishes rent, light, heat, and clerk hire for the maintenance of the 'phones. The American Telephone Co., however, is

when we consider that the company made two dollars for every one received by the retailer it is hard to conceive how druggists and telephone companies in other cities can shut their eyes to both the improvement of the service and increase of income possible if the telephone situation is handled properly. Wilhelm Bode-

using the utmost endeavors to reduce this commission, making a flat rate of 10 per cent on all messages. Ex-President Guilford considered this reduction unfair and unjust and recommended that the association demand a commission of not less than 40 per cent, and urged the Telephone Committee to use every honorable means to accomplish this end. Incidentally Mr. Guilford congratulated the Telephone Committee on its splendid success in adjusting the telephone difficulties between the retail drug trade and the telephone companies throughout the United States.

It was finally resolved that the organizer selected to



W. S. Elkin, Jr., of Atlanta, Ga., a prominent member of the association who officially notified Mr. Mann of the presentation to be made to him later on.

work under the supervision of the Telephone Committee should visit such cities as give promise of installing the slot 'phone. He is also to visit any places that have telephone troubles in order that he may adjust them in the interest of N. A. R. D. members. From time to time representatives of the N. A. R. D. will confer with the officials of the telephone company with a view to preventing encroachments upon the present business compensation.

D. J. Reese, in a supplementary report to the Telephone Committee, showed that the telephone earnings in Philadelphia were greatly increased by the installation of booths and other equipment. The average monthly receipts advanced from \$15 to \$30. In fact many stations doubled their receipts by a change in equipment. In Philadelphia much good has been accomplished by properly coöperating with the Bell Telephone Co. During the past eighteen months the Pell Company has spent \$40,000 on druggists' telephone equipment.

A TAX ON MEDICINAL PROPRIETARIES

When the Sherley bill came up for consideration the cry arose at once, "kill it." This bill, it will be remembered, proposes to revive that part of the old Spanish war tax which imposed a tax on all proprietaries han-

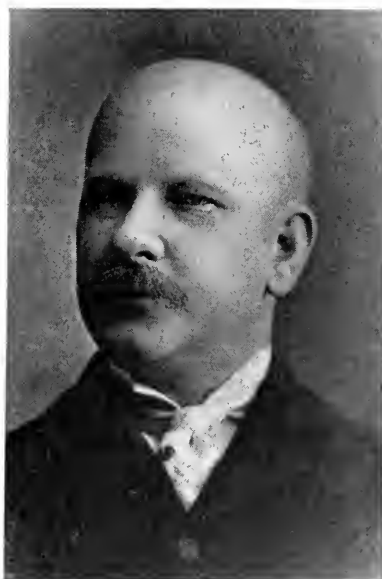
dled by the retail druggist. The results of that tax are still fresh in the minds of all those who shared in the taxation. Through his loyalty to his country and the knowledge of the need of taxation of all kinds of business in war time, the druggist accepted the burden then without complaining. Now to reimpose this burden upon the already overtaxed druggist, seems an unjust, unwarranted and unnecessary taxation.

As soon as the Legislative Committee learned of this bill they immediately proceeded to show their strong protest against it and to use every possible means to prevent the burden being reimposed upon the retail druggist. When we realize that there are over 400 members of Congress who have a right to vote upon this measure, and that some of them were strongly urging the passage of the Sherley bill, we see the task that was before the Legislative Committee in attempting to defeat the measure.

Of course the local and State associations were of assistance in that they notified the members of Congress from their districts that they were very much opposed to such legislation. The Legislative Committee filed with the congressmen several strong petitions received from druggists in different States. At present it looks as though the Sherley bill will probably never be reported out of committee, but it will be necessary for the druggists generally to keep a close watch over the coming session of Congress.

BILL TO CREATE A DEPARTMENT OF PUBLIC HEALTH.

Frank H. Freericks, who took the chair in the absence of Judge Farrant during the legislative conference, said



Harvey I. Leith, of Providence, R. I., re-elected treasurer.

that the bill to create a department or bureau of public health at Washington is the most important that has come up in the last ten years. It must have consideration now, for in a year the bill will be a law. At present it ignores pharmacy. Nor is there any recognition of chemistry. Dr. Anderson indorsed a resolution requesting a recognition of pharmacy in the Department of Public Health. F. W. Meissner of Indiana said that

the A. Ph. A. had favored a department of health provided it have a bureau of pharmacy and chemistry. Charles H. Huhn also insisted that pharmacy be recognized in this department. James F. Guerin of Worcester, Mass., demanded that a pharmacist be appointed to the department of public health.

The convention had no objection to appointing the director of public health to a position in the president's cabinet, but it was felt that his qualifications should be specified. By way of showing the importance of this department Frank H. Freericks pointed out that the department of public health will have in charge all the various functions pertaining to the public health. Thereupon Thomas Stoddart of Buffalo reminded the convention that each State, county and city already has its own board of health. The maintenance of a national department of public health would therefore mean further taxation for what is already taken care of. We have sufficient bureaus of health now. Charles M. Carr, editor of *N. A. R. D. Notes*, expressed himself as opposed to a department of public health, but added that if one must be, then let pharmacy be recognized. This practically is the attitude of both the A. Ph. A. and the N. A. R. D. generally.

Thus far the bill to create a department of public health has failed to pass Congress notwithstanding the influence that was used to put it through. It was finally resolved that the N. A. R. D. favors a national department of health for the control, discharge and supervision of all national government activities which concern the public health, provided first that its establishment include a supervising board with proper representation from pharmacy to whom all questions contemplating changes from existing conditions, and manner of regu-

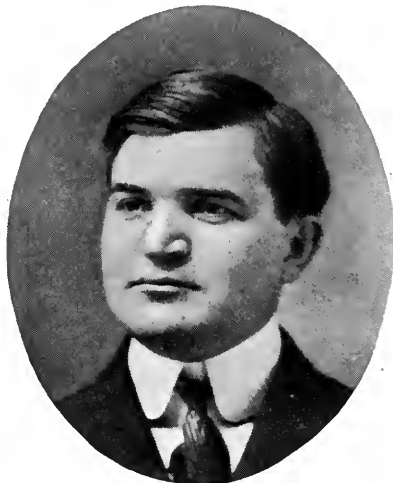
consider the provisions under which a national department of health is to be established.

SYSTEM OF ELECTING DELEGATES.

There was a disposition among some of the members of the convention to criticize the present system of electing delegates. The N. A. R. D. wants the support of the State association, but John C. Wallace, of Pennsylvania, contended the association does not need monetary aid. Mr. Wallace maintained that all States should have equal representation in the national body. He does not believe in a monetary basis of representa-



Thomas S. Armstrong, who advised the convention not to become involved in Dr. Wiley's recent embroilment.



D. N. Robin, of Pittsburg, who, as President of the National Association of Pharmacologists, was a delegate at the meeting.

lation for control, must be submitted, and whose decision must be final in governing the administration of said department. Secondly, that its various sub-departments include one especially devoted to pharmacy and another to chemistry, each to be in charge of a specially qualified person. It was resolved, too, that the Executive Committee be instructed to request representation for pharmacy at conferences that are held to

tion. All State associations should be considered as delegates at large. State associations are composed of manufacturers, wholesalers, and teachers, as well as retailers, and the first three are not eligible to representation. Each State, he maintained, should pay \$25.00 and have equal representation.

Simon Jones, on the other hand, said the N. A. R. D. can use every dollar obtainable. Mr. Meissner of Indianapolis said that at present \$25.00 is the charge for two representatives. The State contributions, according to Secretary Potts, amount to about \$2300 a year. Delegate Meissner, while unwilling to lessen the receipts of the N. A. R. D., felt that equal representation for all States is desirable. In many instances, he argued, local organizations have drawn upon the State for delegates instead of paying for them out of the funds of the local associations. Mr. Meissner added that the only equitable system was one where all States have equal representation.

Robert K. Smither, of Buffalo, held that the N. A. R. D. wants the moral support of the States, but added that representation without taxation cheapens the privilege of representation in a national body. No one appreciates anything that he doesn't have to pay for. A State having few representatives in a national organization does not deserve as much representation as the

State with a large paid membership in the national body. Mr. Smither recommended that the States continue to pay a per-capita tax. There are now 32 affiliated State associations.

Mr. Elkin, on the other hand, favored equal representation for all States. He cited the Senate as a very good model for the N. A. R. D. In the Senate each State is allowed two members. Mr. Elkin didn't care whether each State had two representatives or three. It mattered not whether they pay \$25.00, or \$50.00, or \$100.00, but Mr. Elkin pleaded for equality in representation of the States. Mr. Cannon, of Illinois, took the same view of the matter as Mr. Elkin.

Finally the advisability of having two delegates from each State was offered as an amendment to the constitution, and will therefore be held over till next year.

AVOIDING THE WILEY ENTANGLEMENT.

A resolution taking Dr. Wiley's side of the recent Washington embroilment was held up, not out of any antipathy to the pure food and drug expert, but rather out of a desire to keep the association free from embarrassing entanglements. This was surprising, considering the way the various State associations went on record as supporting Dr. Wiley in his recent conflict with Secretary Wilson of the Department of Agriculture. The association neither indorsed nor censured Dr. Wiley, the idea being to let the Washington authorities decide themselves whether Dr. Wiley was in the right.

Mr. Emanuel, of Pittsburg, said that the convention could not fail to indorse Dr. Wiley without reflecting on the national association. Thereupon Mr. Armstrong showed how the N. A. R. D., in keeping with its past policy, could continue to approve of pure food and drug legislation without mentioning Wiley's name. Mr. Pritchard maintained that it would be a shame to adjourn the convention without favoring Dr. Wiley, a sentiment which was indorsed by Mr. Meissner. The Chicago delegates, it seems, were ill-disposed to Dr. Wiley over the ice-cream prosecutions that had been made in that city.

Finally, a resolution was adopted that really side-stepped the Wiley-Rusby incident. The thanks of the association were extended to Dr. Wiley and his associates for every act of theirs which have given effect to the principles of pure food and drugs as declared and reiterated by the N. A. R. D.

PRICE PROTECTION.

Throughout the history of the N. A. R. D. price protection has stood out as the great issue. While various plans have been tried and found failures, the association feels that it is just beginning to find a way to obtain a living profit on the sale of proprietary medicine. In this connection due appreciation was shown the Miles Medical Co. for the vigorous and whole-hearted manner in which it had championed price protection on the trade agency contract and serial numbering plan. Thanks were also extended to the Freeman Perfume Co. and all other manufacturers who have supported the cause of price protection.

The hope was expressed that the action of the Miles Co. should serve as an object-lesson to every other manufacturer marketing his products through the retail

drug trade. Pres. Guilford urged upon all the members assembled the necessity of doing everything in their power to assist those houses who father the price-protection plan. He urged that when a contract is submitted for signature the retail druggist sign it at once and thus do his share in making more general the system of price protection.

The association firmly believes in the effectiveness of a contract plan as a means of securing legal and beneficial price protection. Considerable interest was shown in the general price-protection system submitted by the Chicago Retail Druggists' Association, to wit:

One dollar "Patents" to sell at wholesale at \$12.00 per dozen free to anybody through whatever channel.

Each bottle to have a coupon of $\frac{1}{2}$ of \$1.00 attached.

Such coupon should be sent, through secretaries of the city and county associations, to the N. A. R. D. headquarters, which in turn should collect from manufacturers, or their agents, the amount due and forward it to the different State, county, or city associations.

Coupons to be redeemable only provided "patents" are sold at full selling price printed on the label.

Preparations of smaller denomination than \$1.00 to be handled similarly.

Preparations selling at below \$2, \$4, and \$8 to bear coupons of proportionately larger denominations.

John J. Boehm, of Chicago, author of this coupon



Frank H. Freericks, who presided ably over the legislative conference.

plan of price protection, addressed the convention and was given a very close hearing.

It was finally resolved that the new plans for price protection proposed by the Lawrence County Retail Druggists' Association of Pennsylvania and the Chicago Retail Druggists' Association be referred to the executive committee with power.

THE PARCELS POST OPPOSED.

In view of the different positions that the various State pharmaceutical associations have taken on the parcels post question, it is well that this question came up for consideration. It seems that during the last session of Congress there were several bills pending, some of which were for a general parcels post, others

for a limited parcels post, and still others for experimental parcels post.

When the committee of national legislation learned that the Post Office Committee was going to take up the subject of Parcels Post, they appeared before Congress and explained why druggists are opposed to it. They pleaded very hard against any form of the system in the belief that it would give large commercial concerns the means of crushing out the small dealers all over the country. That feature of the scheme was placed very forcefully before the Post Office Committee, and the N. A. R. D. itself, at the Niagara convention, went on record again as opposed to a parcels post of any sort or nature.

CHANGING THE NAME OF WOOD ALCOHOL TO WOOD NAPHTHA.

There was a vigorous debate over the advisability of changing the name of wood alcohol to wood naphtha. Soon after the adjournment of the Pittsburg convention last year Judge Errant took up the resolution of that convention with a view to adopting the name of "wood naphtha" in place of wood alcohol or methyl alcohol. After some investigation he concluded that



H. B. Guilford, retiring president and member of the Executive Committee.

this is a matter to be considered separately by each individual State.

Secretary Potts said that in Minnesota the name of wood alcohol has already been changed to wood naphtha, and he quoted Judge Errant to the effect that it would be hard to make this law national. Mr. Potts suggested therefore that each State follow the action of Minnesota in this matter. No revenue is derived from wood alcohol. For that reason the Federal government cannot interfere. The whole matter is without the jurisdiction of interstate commerce. Mr. Potts argued that there is no need of using the name "wood alcohol." The uneducated are apt to consider this fluid merely a cheap grade of ethyl alcohol, a mistaken belief that has led to many cases of poisoning.

Mr. Wallace said that in McKean county in Pennsylvania, where people live in contact with wood alcohol, there are no cases of poisoning from the substance. He maintained there should be good reason before the association attempts to change the name from wood alcohol to wood naphtha. Mr. Armstrong, on the other hand, cited a case of a hobo who was stricken blind by drinking wood alcohol. Mr. Anderson also took up the cudgel against the use of the term wood alcohol and showed how even physicians confounded ethyl and methyl alcohol. And turning slyly to Mr. Wallace, Mr. Anderson remarked that possibly the Pennsylvania people, after their usual tolerance for ethyl alcohol, have an unusual capacity for wood alcohol.

Mr. Meissner, of Indiana, contended that wood alcohol should be tabooed for all medicinal uses, external as well as internal. Delegate Stuckey said that five men had perished in his town for mistaking wood alcohol for ethyl. He cited another case of total blindness following the ingestion of wood alcohol. Mr. Selzer, of Cleveland, also cited a case. Mr. Wallace, still unconvinced, questioned the poisonous nature of wood alcohol, whereupon some one shouted: "Drink some of it."

It seems that there is a temptation among druggists having no liquor license to sell wood alcohol. Mr. Bodemann told of a college professor who suffered blindness from trying for himself the physiological effect of wood alcohol. Mr. Emanuel moved then that the Pharmacopœial Committee be requested to introduce wood alcohol under the name of wood naphtha. Mr. Pritchard said that the A. Ph. A. had resolved to induce State organizations to use the term wood naphtha.

THE GREATER LEGAL DEPARTMENT.

The N. A. R. D. has been considering the feasibility of giving greater legal service to the members. It will be remembered that the action of the Executive Committee following the resolutions adopted by the Pittsburg convention last year formulated some ambitious plans for the Legal Department. In brief, they intended to put at the disposal of all affiliated associations and all the dues-paid members the services of the Legal Department of the N. A. R. D.

The plans outlined for the greater Legal Department are to furnish as much advice as possible to individual dues-paid members, to aid State associations and State legislation, to originate both State and national laws when deemed advisable, to codify the laws of the various States with the aim of bringing about uniform legislation, and to extend the Legal Department of the N. A. R. D. whenever possible. That the new movement has been much appreciated is evidenced by the extensive use which has been made of the department. When it was announced that the N. A. R. D. had created a Greater Legal Department, associations and druggists everywhere communicated with that department in increasing numbers. It is believed that the N. A. R. D., in undertaking this work of coöperation with the affiliated associations, State and local, is entering upon a most promising field. The only danger seems to be the liability of entailing too great an expense for the parent organization.

U. S. P. AND N. F. PROPAGANDA.

The U. S. P. and N. F. propaganda received considerable attention. Statistics from the organizers' work indicated that the plan of carrying on this work and the material sent to doctors are generally accepted as entirely satisfactory. In the majority of cases where the propaganda has failed, Frank C. Ullrich, General Organizer, attributed the failure to the fact that the retailers did not carry out their part of the plan. The report of the previous U. S. P. and N. F. Propaganda Committee made at Pittsburg last year contained several valuable recommendations which were carried out during the past twelve months. In Boston the local druggists have hired a detail man to canvass the doctors three times a year in the interests of U. S. P. and N. F. products. The results of this work have been very satisfactory. It was generally felt that the number of U. S. P. and N. F. preparations called for in prescriptions has increased during the past two years.



Mrs. William E. Lee, who becomes secretary of the W. O. N. A. R. D. after several years' occupation of the presidency.

very appreciably through the efforts of the Committee on U. S. P. and N. F. Propaganda. This has been accomplished largely through a liberal distribution of samples and the extensive use of literature.

MR. MANN'S RETIREMENT.

Considerable regret was expressed over the resignation of Charles F. Mann as chairman of the Executive Committee. It was resolved that whereas Mr. Mann has retired after serving so many years with such ability, an irreparable loss had been sustained. Feeling that some formal observation should be made of Mr. Mann's retirement from the Executive Committee, Mr. Elkin, on behalf of his many friends, mounted the platform and addressed Mr. Mann: "Mr. Mann, I have been authorized by some of your numerous friends at this convention to say a few words to you. At this meeting the only sadness which I have heard expressed is that Charles F. Mann is going to retire. Your friends realize your sacrifices and they

have felt that something extraordinary was due you." Mr. Elkin then went on to inform Mr. Mann that several of his friends had contributed for the purpose of presenting both Mr. and Mrs. Mann a token of their esteem. Only Mr. Elkin's extreme tact and wit saved his presentation speech from spreading a feeling of sadness over the convention. Certainly Mr. Mann goes down in the history of the N. A. R. D. as one of the strong men of the organization, one who has always served that body with unstinted generosity and devotion. He has given liberally of time that many houses would have been glad to pay for.

Mr. Mann in replying expressed the wish that he might give up his job without this publicity. He assured the convention that he has been amply rewarded for his services in the many friendships that he has made in the association. "I don't know any greater heritage that a man can have," he said, "than to retire with the warm regards of the members of this association."

THE NEW OFFICERS.

The following officers were elected:

President, H. C. Shuptrine of Savannah, Ga.

First Vice-President, T. B. Cartmell, Wilmington, Del.

Second Vice-President, E. A. Bernius, St. Louis, Mo.

Third Vice-President, S. A. Eckstein, Milwaukee, Wis.

Secretary, Thomas H. Potts, Chicago, Ill.

Treasurer, Harvey I. Leith, Providence, R. I.

Executive Committee: Charles H. Huhn of Minneapolis, Minn., chairman; H. B. Guilford of Rochester, N. Y.; Henry W. Merritt of Plains, Pa.; J. Arthur Bean of Boston, Mass.; A. E. Zuber of Chicago, Ill.; E. H. Thiesing of Cincinnati, Ohio.

THE W. O. N. A. R. D.

The Women's Organization convened in the parlors of the International Hotel. Mrs. William Estell Lee of Philadelphia presided over the deliberations of this organization. The officers elected are as follows:

President, Mrs. C. A. Storer of Chicago, Ill.

First Vice-President, Mrs. J. G. Godding of Boston, Mass.

Second Vice-President, Mrs. Louis Emanuel, Pittsburg, Pa.

Third Vice-President, Mrs. F. H. Fricke, St. Louis, Mo.

Fourth Vice-President, Mrs. J. O. Bosley, Wilmington, Del.

Fifth Vice-President, Mrs. R. G. Rutherford, Brooklyn, N. Y.

Secretary, Mrs. William E. Lee, Philadelphia, Pa.

Treasurer, Mrs. Otto C. Groenland, Cincinnati, Ohio.

Executive Committee: Mrs. W. S. Richardson, Washington, D. C.; Mrs. R. E. Dorland of Decatur, Ill.; Mrs. J. J. Seiberz of Louisville, Ky.; Mrs. John T. Roe of Mobile, Ala.; Mrs. F. E. McBride of Youngstown, Ohio; Mrs. H. C. Shuptrine, Savannah, Ga.

The place of meeting for next year has not yet been decided.

A HALLOWE'EN WINDOW OF COUGH SYRUP.

An Old Mill and an Abundance of Foliage Make a Very Attractive Trim—One Druggist Tried it with Good Results—Details of His Arrangement.

By W. J. DUNLAP,
Canonsburg, Pa.

I submit a picture of a window display I used last Hallowe'en with very gratifying results. The trim attracted so much attention that our daily paper took notice of it and gave us a write-up which proved to be a very good ad. It is inexpensive to make and may be used to exploit any preparation. We were boosting our cough syrup.

I first drove out to the country and gath-

coming together gave off a good imitation of steam. Under the pot I had a pile of large lumps of charcoal, in the center of which I had a red electric light bulb.

BEAUTIFUL AT NIGHT.

At night it certainly showed up beautifully. There were two or three large rough stones in the window, on which the witch was stand-



ered a lot of choice branches and autumn leaves. The ones we secured were dogwood and showed a number of beautiful tints, mostly red and gold. They were covered too with beautiful red berries, which do not show in the picture. I procured a large-sized cheap doll and had it dressed in the witch's costume as shown, making a wig of white rope. I made a tripod of rough limbs and hung on it a pot in which I had one bottle ammonia water and one of muriatic acid; the fumes

ing stirring the pot. A card leaning on the rock bore the announcement: "Brewing Herbs for Our Cough Syrup."

In the opposite end of the window was an old Dutch windmill. Motor power was supplied by a belt run from an electric fan concealed inside to a pulley on one end of the paddles. The mill certainly attracted a lot of attention. I had made it out of a sugar barrel with a keg on top. Both were covered with crêpe paper in blue and gold. Black

bands served as hoops. A small boy doll, dressed as a miller, stood in the doorway: A spout from the mill extended into an old iron pot containing several kinds of herbs. Near by was a card: "Grinding Herbs for Our Cough Syrup." I had three pyramids of cough syrup in window with a card on the one in the back reading, "Stop that cough—Red Spruce and White Pine will do it. A Bottle 50c. and 25c."

Fine wire extended across the back of the window, upon which I hung branches of autumn leaves. Among the foliage I had about a dozen small Jack-o'-lanterns containing small electric lights. These one can buy at almost any racket store for 10 cents each. I

suspended in the center a framed card containing "All Hallowe'en Greetings."

When the lights were turned on at night, the mill running and the pot steaming, the window was certainly a stunner. I am safe in saying that no man, woman or child went up or down our street for two weeks without stopping to take a look.

In conclusion let me say that the sales on our cough cure were very large. We received congratulations by the hundred on this window. The entire cost of the window was not over \$5, and it took one man six hours to complete it.

I am sure any one who copies this idea will be pleased with the results.

MAKING SOUVENIR POST-CARDS PAY.

Buying with an Eye to Profits—The Salability of High-priced Subjects—Several Methods of Display—Special Sales to Stimulate the Business.

By BURTON L. BENNETT,
Bristol, Conn.

Post-cards well displayed are half sold. I have proved this to my complete satisfaction. I am a firm believer in side-lines for the average modern drug store; and post-cards are one of the best side-lines, because they take up



"Giant rack" for displaying post-cards.

very little space, are ready sellers, and pay a good margin of profit.

I was a little late in stocking post-cards, thinking that it was only a temporary fad. Thus I lost the prestige and benefit that belong to a pioneer, as well as the profits that would have accrued to me. An intelligent display of post-cards would have brought a

steady stream of nickels and dimes to my cash register. But I have since made up for my delay by going after the business in a large way, and I feel I have been well repaid for the effort by the satisfactory volume of business I have worked up in this line.

I believe the post-card business has come to stay and is bound to increase in certain directions, particularly in the sale of the higher grades of local views, birthday and holiday cards.

SOME SPECIAL SCHEMES.

Let me outline, briefly, some of the ideas and schemes I have utilized in building up my post-card trade.

I would like to say to those who have never sold post-cards, but may contemplate doing so, that the best argument I know of why they should get a share of this business is that the margin of profit is large, in fact as satisfactory as that derived from the sale of drugs. I average from 100 to 400 per cent profit on all the cards I sell.

The idea is not to see how cheaply cards can be sold but rather to see how cheaply they can be purchased.

Subjects that retail readily at two for five

cents cost anywhere from fifty to seventy-five cents per hundred; occasionally a particularly good card may cost \$1.25 per hundred. This allows a clean profit of 100 to 400 per cent.

Many dealers make the mistake of selling their cards too cheap, because they happen to purchase an assortment at a low price, forgetting that in every lot of cards purchased there are bound to be a number of slow sell-

<p>FOR 25c.</p> <p>IN STAMPS We will mail, post-paid, to any address, one dozen selected Post Cards, consisting of local and state views of interest to all Post Card collectors.</p>	<p><small>FROM</small></p> <p>BENNETT'S DRUG STORE, BRISTOL, CONN</p> <p>Headquarters for Souvenir Post Cards.</p>	<p>PUT STAMP HERE</p>
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The face of an envelope in which Mr. Bennett mailed post-cards to customers.

ers and a few that may not sell at all. That is why I get big prices for the bulk of my cards. I can then take the slow sellers, make a special "One-cent Sale" of them, and dispose of the entire lot at a big profit.

The profit is also large on the higher priced cards, of which it pays to keep a large assortment. I keep a goodly number of fancy birthday and greeting cards to sell for 5, 10, 15, 25, 35, and even as high as 75 cents each.

I am often surprised at the number of high-priced cards I sell, as well as at the class of people who buy them. The foreign population especially take to fancy cards of this description; they pay no attention to the cheaper ones. The best is none too good to send to the folks at home in the old country.

A GOOD DISPLAY RACK.

I display my cards principally on what I call my giant rack. This rack is one I built myself, and while I do not claim entire originality for it, still I have never seen anything exactly like it.

The illustration gives one an idea of its size and shape. It stands in the center of my store, occupying a position over a large steam radiator, thus taking up but little more space than the radiator itself.

This giant rack is 8 feet long, 6 feet 4 inches high, and 2 feet 6 inches wide at the base, tapering up to the top in the shape of

an inverted letter V, where I have left an opening of 3 inches to let the heat from the radiator through.

This rack is built of clapboards overlying each other, with the thick edge uppermost, screwed to a framework, filled and varnished. I so arranged the spacing of the boards as to allow for displaying some rows of cards horizontally, others vertically.

I used bright wire screw-hooks to hold the cards in place on the rack. This rack will hold about 16,000 post-cards, which provides for a large assortment of local, birthday, comic, and other kinds of cards. Customers coming into the store cannot fail to see it; they can walk around it, selecting here and there the cards they wish, paying the clerk as they pass out.

The illustration of the display of Thanksgiving cards shows another method I use for display. Sometimes the cards are placed in the window, again just outside the door, to draw the attention of passers-by.

This display frame is easily made of old boards with a heavy 2½-inch molding around the edges. The center is covered with any colored cloth desired, while the molding is covered with white enamel paint. With this frame one can make many different arrangements of cards, and effective ones as well.

I make frequent window displays; if the

<p>POST CARD</p>		<p><small>PLACE STAMP HERE</small></p>
<p><small>This space may be used for Correspondence</small></p> <p>SAVE THIS POST CARD.</p> <p>It is a sample of Souvenir Post-Cards from large display at BENNETT'S DRUG STORE, Bristol, Conn.</p> <p>IT IS WORTH 5 CENTS</p> <p>Towards the purchase of a pound of Bennett's Chocolates or Confections if presented at the candy counter any time during October.</p> <p>KODAKS. POST CARDS, DRUGS, CANDY.</p>	<p><small>This space is for the Address Only</small></p>	

Using unsalable post-cards to advertise the line, this text being printed on the front side.

subject be something novel and out of the ordinary, so much the better, as it attracts more attention. One ought to make big displays of Thanksgiving, Christmas, and Easter cards, as they are the largest sellers.

The photograph of an air-ship shows one of the window displays that drew much attention to my line of post-cards and brought many sales. This air-ship occupied so much space

in my window that I took it out in the back yard to be photographed.

It was easily constructed, requiring more time than materials in the building. The cylindrical part representing the gas-bag of an air-ship was made by cutting out circular pieces of wood and holding them in place by thin strips of wood bent to give the proper shape. The post-cards are then attached by means of strings and tacks. The lower framework, for the support of the rudder and basket, was made from light wood strips colored with alabastine. This framework and the passenger basket were held in place with small brass chains, easily purchased at any hardware store.

How to construct the propeller and keep it in motion was the hardest problem. I solved that by taking a square piece of tin, cutting and folding it just as children do in making paper pin-wheels. This was then attached to the framework of the air-ship in such a way as to be easily kept in motion by the breeze from an electric fan.

A doll or two placed in the basket as passengers, a couple of flags to give added life, were all that were needed, and the air-ship was ready for business. A few printed cards were

tention and sold many cards was a penny post-card sale arranged in the window to represent a huge funnel.

I cut out of cardboard a circular piece and printed on one side of it as good an imitation as I could of the reverse side of a copper cent,



A display rack that may be set in the window or the doorway.

with the words on it "One Cent." This sign I placed in the center of the window, on a line with the eye from the sidewalk, about six feet from the glass. Then I ran many strings from the circumference of this sign to edges of the window. These strings were then filled with cards, and when completed gave the person looking in from the street the impression they were looking into a large funnel. I dropped an electric light inside this funnel to light it up at night, and the display proved very effective in drawing attention to my line of post-cards. It sold many of them.

SPECIAL POST-CARD SALES.

Every store nowadays has special sales of some sort. Why not have special sales of post-cards? An idea that is worth trying is to purchase a good line of holiday cards, like St. Patrick's, Decoration Day, George Washington Day, and Fourth of July cards, costing possibly 50 cents a hundred, putting a stamp on each one, then displaying and selling them for 2 for 5 cents. This can be easily done, giving a good profit, and still be a little out of the ordinary.



An "air-ship" display of post-cards. It was arranged in the yard and then suspended in the window.

placed in the window to call attention to the sale: "Mail Your Post-cards by Air-ship." "We Sell Stamps." "Up-to-Date Post-cards." "Giant Rack Inside, Come In."

ANOTHER WINDOW DISPLAY.

One of the very best ideas I ever used for a window display and one that drew lots of at-

There are always a certain number of cards in every assortment that prove to be slow sellers and accumulate in stock. It is not wise to let them stand in the rack too long, as customers soon tire of seeing the same cards. This is a point not to be overlooked in selling post-cards: keep changing the arrangement of your assortment and

freshen up the stock with new cards as often as possible.

One good way to dispose of the "stickers" is to have some advertisement printed on them and give them away at fairs, socials, circuses, etc. They can also be placed in packages leaving the store, in this way drawing attention to your stock of cards.

PUSHING YOUR OWN TOILET PREPARATIONS.

The Importance of Having Superior Quality in Such Specialties—Pointers about the Containers—Methods of Furthering Sales—The Profit in the Line.

By E. E. CALKINS.*

I will have to admit that I am not writing on this topic because I feel that I have been more successful than other druggists along this line, but because the subject was assigned to me at the last meeting. Yet I am willing to state the results of my experience as a basis for your discussion.

QUALITY FIRST.

My reasons for pushing my own preparations are purely selfish, I assure you. I have no great discoveries which I feel in duty bound to distribute to suffering humanity. I have only a desire to sell some things that can be sold by no one else, that must be purchased at my store, that will therefore bring people to my pharmacy if they like and want them, and that, being of high quality, shall advertise to the users my skill as a dispenser of things pharmaceutical. This being the case, quality is of first importance.

My cold cream must be as good as the best so that I and my clerks can look a woman in the eye and say: "Madam, this is a good cold cream. It is made of the very purest materials. It will not turn rancid. It is of delightful consistency and I am sure that you will like it." If it is good, the woman will want more, will recommend it to her friends, and will come to me for other things. A preparation which is not a repeater is a waste of time and energy and, if recommended by you, gives the lie to what you tell your customers about it.

LOOK CAREFULLY TO THE CONTAINER.

The package is next in importance. A cold

cream jar which is not convenient to open and close, or which is so deep that the contents cannot be easily taken from the bottom, will prevent future sales. A package which is not neat in appearance is not wanted on the dressing table. A tin can may do for use behind the scenes at a theatre, but for home use the neatest, daintiest package you can find is none too good.

In my experience I have not found it necessary to use a carton. A package which is to be shipped from factory to retailers and be carried long upon the shelf may need this protection, but your own packages should always have a new, fresh appearance, as though they had not been made long enough to accumulate dust. Better put the cost of the carton into the lithographed label or the jar—or keep it yourself.

NINE METHODS OF PUSHING SPECIALTIES.

There are many ways of pushing your own preparations:

First and foremost is personal push and salesmanship.

Second, the active coöperation of your clerks, secured by commissions or otherwise.

Third, prominent displays in the store, not necessarily in large quantities, but so placed that customers must see the goods and the price-cards attached.

Fourth, window displays and placards.

Fifth, frequent mention in your newspaper or other advertisements.

Sixth, folders for enclosure with packages and monthly statements, or for distribution to names on select mailing lists.

Seventh, gifts to customers of full-size

*A paper read at the last meeting of the Michigan State Pharmaceutical Association.

packages when they make purchases or pay their accounts.

Eighth, by the distribution of small samples. If samples of your preparations will not help to sell them, there is something wrong with the goods. Many a time a customer will say, "Oh, yes, I had a sample of that, I will take it."

Ninth, by using a product as a leader at a cut price for one or more days, either alone or in combination with staple articles. Special sales always appeal to women.

THE PROFIT.

Will it pay? Yes, it will, even if you spend all your profits on the article in introducing it as outlined in the foregoing ways. You can talk quality in advertised goods, but your competitor has the same goods. When, however,

you talk quality on your own preparation, and your customer finds that your claims are true, you have made an impression upon her mind that will make her think of you when she wants quality.

Often those things which are not directly profitable are so indirectly. Very few of you can point to a newspaper advertisement which sold enough goods to pay the cost of the ad., but advertising does help our business and the greatest enterprises are built upon advertising. Just so, it pays us to push certain toilet specialties for the sake of the indirect effect upon our business.

But direct profits should also be produced. Surely your own preparations need not cost you two, four and eight dollars, even if they are as good as others which do cost you that much.

TRAVELING IN PERSIA.

Pharmacies Needed in that Country—Conditions there Make Medical Treatment Difficult—Glimpses of that Far-off Asiatic Nation.

Tabriz, Persia, is, practically speaking, a continuation of the Caucasus which belongs to Russia. Russian influence is so prevalent in the north of Persia that after one has

meals start with mutton in the morning, have mutton during the day, and end with mutton in the evening.

Tabriz has a population of 300,000 people. The foreign colony is very small. There are four pharmacies, some 20 European and



Auto-bus for carrying passengers between Djoulfa on the Russian-Persian frontier and Tabriz, Persia.

stayed in Tabriz a few days he cannot help noticing that everything connected with trade and industry is controlled by Russia.

The Persian houses are situated behind high, gloomy walls cutting off life from the street. Every woman in Persia looks like a moving bundle of humanity covered from head to toe with a black fabric. As for food,



Medicine chest with inscription in the Persian language presented by Parke, Davis & Co. to His Imperial Majesty, the Shah of Persia.

American physicians, and 50 native "healers." There is a large opening for European pharmacies, without which medical treatment is very difficult. As matters stand at present

every European and American physician is compelled to carry a stock of pharmaceutical



Mr. D. A. Ruffmann (sitting), the manager of the St. Petersburg branch of Parke, Davis & Co., and Prince Eristoff (standing), representative of that house for the Caucasus and Persia

preparations for dispensing directly to the

patient. Persia being far away from the source of supply of these preparations, one can imagine the grave situation. Only after properly equipped pharmacies have been opened will it be possible for a number of European physicians to settle down in Persia. The Persian government raises no obstacles whatsoever against foreigners who desire either to open pharmacies or practice medicine there.

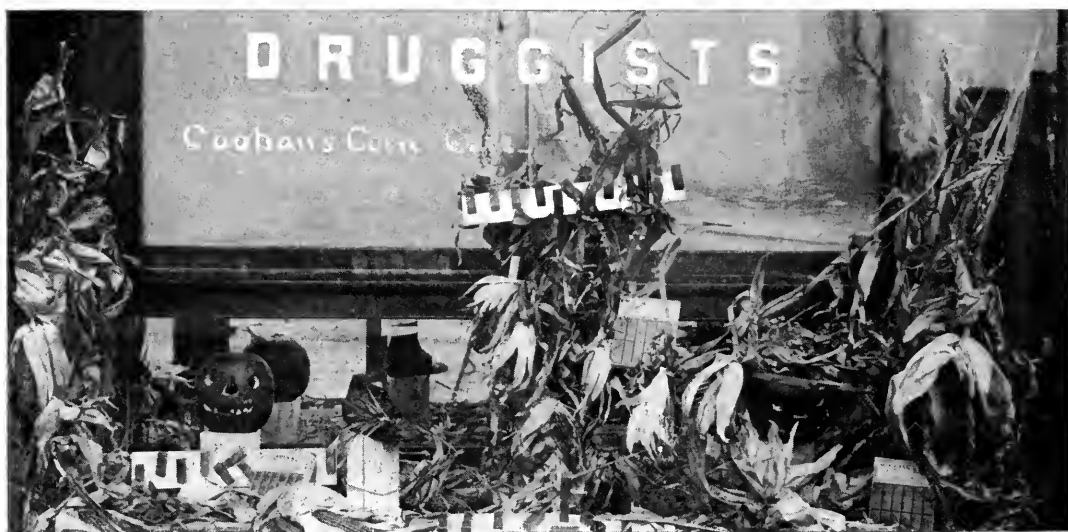
The Caucasian Pharmaceutical Society of Tiflis is about to open a wholesale and retail drug store in Tabriz. Of course that will induce Europeans to open pharmacies, as it will be handy to draw supplies from the Caucasian Pharmaceutical Society.

These facts are sent us by D. A. Ruffmann, Russian representative of Parke, Davis & Co., who recently took a trip into Persia. Mr. Ruffmann called upon the Governor-General and handed to him a beautiful medicine chest for presentation to the Shah. An illustration of the chest will be seen in one of the accompanying engravings.

A HALLOWE'EN CORN-CURE WINDOW.

B. S. Cooban of Chicago got up a corn-cure window during Hallowe'en week last year, and he is authority for the statement that it attracted a great deal of attention at

out of which in the proper region a corn had sprouted into quite a good-sized stalk. Elsewhere throughout the window were packages of the Cooban corn cure, placed on the win-



the time. The window itself is shown in the accompanying engraving. Corn on the stalk furnished the basis of the display. At either end of the window was a Jack-o'-lantern. In the center, a little at the left, was an old shoe,

dow floor, and fastened to the cornstalks themselves. A legend painted in white on the window-pane itself read: "Cooban's Corn Cure." An abundance of foliage was used in the display.

SELLING GOODS BY TELEPHONE.

How a Retail Druggist Can Obtain Business Over the Wire—The Need of a Delivery Service—Soliciting Telephone Orders—Calling Up the Doctors Regularly—A Simple but Effective System of Advertising.

By F. G. EBNER.

The druggist of to-day is always on the alert to acquire new ways of reaching out for new business. The telephone, the much criticised instrument, the much abused silent util-

BROWN, Apothecary.

Telephone No. 123.

Dear Madam:—

We realize that you are busy at times with household duties and a thousand and one other things. You need a drug or something in our line. Maybe a sundry for the sick-room or a toilet necessity. You may want a hot-water bottle, or something else; if you desire several to pick from, I shall gladly send you an assortment and you can make your choice. Select one that will meet your need in quality, price, and style. I shall deliver anything right away. Right away means immediately with me.

Trusting I may be of service to you when you are in need of anything in a hurry, I am,

Yours very truly,

BROWN, The Druggist.

A personal letter soliciting telephone orders.

ity, has been the means of getting more business in many lines of commercial work, but probably has not been utilized to its fullest extent by the drug retailer of to-day.

We hear many criticisms in this day and age about the telephone; along with every good thing in this world we find its abuses. We know this is true about drugs; naturally the telephone falls heir to its share.

GETTING BUSINESS OVER THE TELEPHONE.

The telephone with all the bad things said about it can be made a paying instrument and

When you want a drug or a sick-room help you want it right away. Telephone Brown 123.

For drugs,
Telephone Brown 123

Newspaper liners soliciting telephone orders.

a means of adding many a dollar to the profit side of the account, if the retailer will take advantage of the opportunity; with drugs and sick-room requisites, people generally want them in a hurry, and when they are in a hurry the telephone is the means of connecting them with the drug store.

A retailer in any part of the city can cater to a telephone trade. But it is very difficult to get people into your store if you are located in a remote part of the city.

There is a great possibility of increasing one's trade by means of this channel; but there are several necessary qualifications:

First of all, the dealer must have a good delivery service, if he intends to hold the trade. By a good delivery service, I mean prompt and immediate delivery. Drug parcels are seldom so large that they cannot be carried by a boy on a bicycle. The first essential is to have a good delivery service; the second essential is to advertise the fact thoroughly and constantly.

The newspaper is a good medium to bring the facts before the people. Typewritten circulars addressed to the people is another valuable means of acquainting them with your telephone methods of doing business. Street-car advertising is a paying investment for any man who intends to carry out this method of getting business.

CALLING UP HOTEL AND MEDICAL MEN.

One retailer I have in mind has a small card printed as follows:

TELEPHONE

Your drug wants.

We deliver immediately.

BROWN, the druggist.

Telephone 123.

This card is placed in every room in the hotels of the city. In some of the larger hotels a telephone is found in every room, and the suggestion is the means of winning trade in this way.

This same dealer carries an ad. on every page of the telephone directory.

To those who are catering to physicians' trade, it is the means of corraling trade that might go elsewhere.

One merchant I know of has for one of the duties of the clerk to call up all physicians

and ask if there is anything wanted in the drug line. There are several hospitals and a county home and he includes these institutions in his daily calls.

This man has created a trade that could not have been reached otherwise. By these telephone inquiries he has won the physicians over and made them good customers.

PERMANENCE OF ASTRINGENT PREPARATIONS.

The Results of an Investigation Extending Over Three Years—Undertaken to Show the Stability of Tannin-containing Fluidextracts and Tinctures—The Necessity of Strongly Alcoholic Menstrua for Such Preparations Clearly Indicated.*

By WILBUR L. SCOVILLE,

Of the Scientific Staff of Parke, Davis & Co.

In March, 1908, a series of fluidextracts of drugs which contain considerable amounts of tannin were prepared for the purpose of studying the stability of the tannin in such preparations. Each was freshly made and was tested as soon as possible after finishing.

The Loewenthal method of estimating tannin was first tried. With some the results were satisfactory, so far as the operation of this process is concerned, but with others it was impossible to get any end-point, and the method was abandoned. From this and subsequent experiences the writer believes that no one method can be applied satisfactorily to all kinds of tannin-containing material, because tannin, as the term is used, stands not for a definite substance, but for a class of substances, ranging from chlorogenic acid to true tannic acid. For specific kinds of tannins, as for the treatment of leather, tests which are adapted to that purpose can be made very satisfactory, but it will be readily understood that for other kinds of tannoid bodies such a test may entirely fail.

After some study and experimentation it was decided to use two methods, found in Allen's Organic Analysis, 3rd edition, Vol. III, Part 1.

THE FIRST METHOD OF ASSAY.

The first method, devised by F. Jean, consists in matching the color produced with a weak solution of ferric chloride and a tannic acid solution of known strength, with a dilution of the fluidextract under examination.

*Presented to the Scientific Section of the American Pharmaceutical Association at the Boston meeting in August.

As in all colorimetric processes, this will vary not only with the personal equation, but in different lights, and with colored solutions.

The fluidextracts were each diluted 1 Cc. to 99 Cc. of water for this test. When fresh, each produced a marked cloudiness with water, but, after aging, some specimens mixed clear with water and all were more miscible than at first. It was not thought best to clarify these solutions any further than by simple filtration through paper, so in the earlier tests a greater degree of cloudiness was contended with than in the later tests. This will account in part at least for the higher results often obtained by this method on the preparations after they had stood for a time.

It is scarcely necessary to point out that this method will estimate not only tannins, but also gallic acid (if present), and any principle which will give a dark color with ferric chloride. It has, however, the advantage of rapidity, and for tests in series on the same liquid it may be expected to show whether any marked changes have taken place in these principles on standing.

THE SECOND METHOD.

The second method, devised by Collin and Benoist, aims to measure the amount of weak tannin solution required to precipitate all of the gelatin from a definite gelatin solution. The end-point on this method is found in the disappearance of a blue color which is added to the gelatin solution, and is aided by the appearance of the precipitate.

In this process much depends upon close attention to certain details, more, in fact, than

was realized in the earlier tests. The gelatin solution must be very hot (80° C.), the tannin must be added very slowly and mixed quickly, and the reaction of both solutions must be alkaline but faintly so. Since alkalies split up tannins, this last is a fatal point for very accurate work, particularly with colored solutions.

The process, however, distinguishes between tannic and gallic acids, and excludes also other principles which give a dark color with ferric chloride. It thus serves as a check upon the first process.

It may be charged that two inaccurate processes cannot make an accurate one. This is certainly true, and the most that can be claimed for the results given below, is that they may show, with a fair degree of certainty, whether marked changes have occurred in the preparations during the three years they have been kept.

The writer wishes to state that his respect for tannin estimations has not been increased any by this work, and that while in the light of an accumulated experience more uniform results might be obtained by a repetition of the work, yet a liberal allowance would need to be made for results by these methods.

THE RESULTS.

The results in the following table are expressed in percentages as a matter of clearness and convenience, but it is highly improbable that the percentages represent actual proportions of tannin. In each series, blanks were used with a solution of pure tannic acid of known strength, and the calculations based upon the figures obtained at the time, but the results with pure tannic acid varied. Differences in the light will account for variations

in the first process, and differences in the gelatin solution and in alkalinity will account for the variations in the second process.

It will be noticed that the results by the gelatin process on the first assay are usually much higher than on subsequent tests, usually about twice as high as the second test. Since the gelatin solution was prepared fresh each time, I cannot account for this except on the supposition that some change takes place in tannin solutions very quickly. And since the U. S. P. nutgall fluidextract is the only one that is made without water in the menstruum, and the aqueous fluidextract of nutgalls corresponds in this respect to the other preparations, it would seem that a hydrolysis takes place. This is further borne out by the fact that the preparations which are weakest in alcohol (chestnut, uva ursi, wild cherry and witch-hazel) show the most rapid change.

Indeed, the most profitable suggestion from this study is that tannin preparations should be strongly alcoholic in order to be permanent, and, conversely, preparations which are undesirably astringent may be rapidly freed from tannin by using a weakly alcoholic menstruum. Thus a fresh fluidextract of wild cherry is strongly astringent, but after standing a few weeks it will lose most of this astringency and become more miscible with aqueous fluids.

Glycerin does not appear to hinder or prevent this change as does alcohol, the aqueous fluidextract of nutgalls being made with a menstruum of 60-per-cent glycerin by volume.

AT THE END OF THREE YEARS.

The physical conditions of the fluidextracts at the end of three years are interesting. The fluidextracts of bayberry, logwood, nutgalls

	March, 1908. Jean. C.&B.		June, 1908. Jean. C.&B.		Dec., 1908. Jean. C.&B.		June, 1909. Jean. C.&B.		Dec., 1909. Jean. C.&B.		Dec., 1910. Jean. C.&B.		April, 1911. Jean. C.&B.	
Bayberry.....	8.6	19.0	8.6	12.5	...	...	8.0	11.0	9.0	18.0	9.0	17.0	7.5	13.0
Blackberry.....	8.0	11.8	8.0	5.5	8.7	5.0	8.0	5.3	7.5	6.0	8.2	...	7.5	2.8
Chestnut Leaves.....	7.05	7.7	7.05	5.5	7.7	5.5	5.7	5.4	6.2	5.1	6.4	5.0	6.0	2.2
Geranium.....	4.3	10.5	6.0	6.8	6.0	5.5	6.0	6.0	5.7	6.0	2.4	2.5	Gelatitized.	
Gambir, Tr.....	0.92	1.3	1.0	0.6	1.0	...	1.0	0.64	0.91	1.2	0.85	0.75	0.96	0.90
Jambul.....	8.0	11.1	8.0	6.3	7.8	5.2	5.7	5.0	7.4	...	6.4	6.0	6.5	3.8
Kino, Tr.....	1.1	2.4	1.3	2.5	1.3	2.0	1.	1.8	1.3	2.0	1.3	2.0	1.3	2.2
Logwood.....	6.6	6.3	6.6	5.0	6.6	...	5.7	3.2	5.5	...	6.3	3.0	5.0	2.2
Nutgalls, U. S. P.....	17.1	10	17.1	10	16.6	8.7	16.0	8.3	13.0	...	15.0	...	13.3	7.4
Nutgalls, aqueous.....	17.1	1.5	10.0	...	9.0	00	...	...	...	...	...	...	...	...
Rhatany.....	6.0	21	6.0	6.8	...	...	5.3	5.6	4.2	5.5	4.1	5.5	2.0	1.8
Rose.....	12.0	19	12.0	6.5	10.5	...	10.6	...	12.0	11.2	12.3	12.0	12.0	5.0
Sumac.....	6.0	7.5	6.0	3.4	5.5	3.3	5.0	2.6	4.5	...	3.0	...	3.2	...
Uva Ursi.....	7.0	9.0	7.0	5.0	7.1	3.3	8.0	2.8	8.0	...	...	00	...	00
White Oak.....	5.0	10.5	5.0	6.4	5.0	4.7	5.0	6.0	5.0	...	3.7	5.0	4.0	2.8
White Pond Lily.....	12.0	13.3	12.0	...	12.5	9.0	13.3	8.0	13.0	...	10.0	7.5	11.0	6.0
Wild Cherry.....	2.7	7.9	2.0	2.2	...	...	...	...	...	...	...	...	...	...
Witch-hazel.....	6.0	9.5	6.0	3.9	5.9	2.2	5.0	3.8	4.6	1.2	4.5	...	4.6	...

(U. S. P.), sumac, rhatany, white oak and white pond lily, and the tinctures of gambir and kino are nearly clear or contain only a very slight precipitate. Fluidextracts of bayberry and rhatany show no precipitate, but they seem to have thickened a little and suggest the gelatinizing process.

Fluidextracts of blackberry, chestnut, jambul, aqueous nutgalls, rose, uva ursi, wild cherry, and witch-hazel have precipitated badly, and in most cases the precipitate has caked together. Fluidextract of geranium gelatinized after about two years.

Of the 19 preparations, the tinctures of gambir and kino, and the fluidextract of nutgalls, are the only ones in which no material change is evident in three years.

The fluidextracts of bayberry, blackberry, chestnut, jambul, logwood, rhatany, rose, white oak and white pond lily kept well for two years, but signs of deterioration now appear in these, though positive conclusions should not be drawn from the last tests. No positive conclusions are drawn for these preparations.

Fluidextracts of geranium, aqueous nutgalls, sumac, uva ursi, wild cherry and witch-hazel show an unmistakable loss of astringency, and mostly within a year. Geranium kept about two years, and then gelatinized, and it will be noticed that the tests within three months of gelatinizing showed a marked and sudden reduction in tannin. Aqueous nutgalls shows evidence of the tannin rapidly changing into gallic acid.

Wild cherry loses its astringency quite rapidly, sumac, uva ursi, and witch-hazel more slowly.

Gelatinization does not take place until the tannin is all changed, and a preparation which will gelatinize finally may have lost most of its astringency without changing its physical appearance. Precipitation may occur to a considerable extent without loss of astringency. But the use of strongly alcoholic menstrua for astringent preparations is strongly suggested.

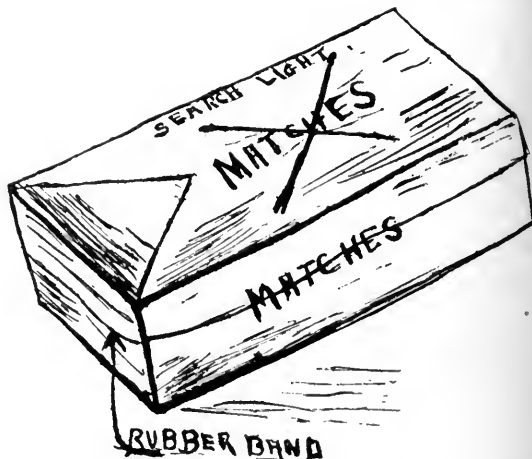
Two fluidextracts of cinnamon were included (Cassia and Ceylon cinnamon) in the investigation, but the estimation of tannin in the fresh preparations was so unsatisfactory that definite records could not be obtained. Evidently the tannoid bodies in cinnamon are not true tannic acid.

Laboratory of Parke, Davis, & Co., Detroit, Mich.

DOLLAR IDEAS

AN ECONOMICAL MATCH DISTRIBUTOR.

H. Kallivoda, Jr., Los Angeles, Cal.: Match fiends are a drain on most cigar departments and this little scheme does its work well. Take a regular 5-cent pack of matches and make a V-shaped incision about 1½ inches long from



both sides of the box. Pass a rubber band around the box to prevent its opening as shown in the illustration. This saves many matches, as a customer can pick up only one or two at a time instead of a handful. The device has meant many a dollar to me.

AN IMPROVISED SCOOP.

H. E. Read, Altamont, Kansas: Scoops are sometimes very scarce in the drug store. In fact one never has enough for all the different articles that are handled with this utensil.

Here is a method whereby every one may



obtain scoops for nothing. Get a tin can or round pasteboard box or any kind of a container varying in capacity from ¼ to 2 pounds or even more. Take a pair of shears and cut the container along the dotted lines as shown in the illustration. Presto, you have a scoop! You can use the pasteboard kind until they are spoiled and then throw them away. But

the tin scoops last about as long as the cheap ones sold in the market.

This is a good method of utilizing empty tins that are otherwise thrown into the alley. The illustration shows a handle, but the scoop can be used about as well without one.

A HANDY CAPSULE ARRANGEMENT FOR THE PRESCRIPTION COUNTER.

E. L. Gaudet, Tallulah, La.: Here is a handy capsule arrangement for the prescription counter. I take nine empty capsule boxes that hold 100 apiece—such containers as Parke, Davis & Co. supply. I then select the 00 size. To this I stick on top the box holding the 0 size, and upon this in turn I paste size 1 with, say, royal glue; and so on until the No. 5 box is reached. This completes a pyramid of boxes. Next I wrap some adhesive tape around these containers twice from top to bottom along the sides to strengthen the arrangement, and then place it near the prescription scale. To replenish the stock of capsules, slide the old container out and slip in the new. I always keep such an arrangement on my prescription counter.

RESETTING HANDLES IN PESTLES.

Ernest W. Henderson, Lynn, Mass.: Pharmacists often experience much trouble in resetting handles in pestles after they have become loosened. I hit upon an idea a few months ago, which has proved very successful, after trying all the formulas that the store library afforded.

Remove the handle from the pestle and clean the adhering particle of cement from the hole and the end of the handle. Wind several layers of gauze around the end of the handle, and, having poured a small quantity of Canadian turpentine into the pestle-hole, press the handle firmly into place. In an hour or two it will have become sufficiently set to use.

STRETCHING RUBBER TUBING.

C. K. Bushey, Dillsburg, Pa.: Often a good deal of trouble is experienced in trying to fit a rubber hose or bulb over a pipe connection, valve, etc., by not being able to stretch the

rubber enough. et hat the rubber by inserting the end to be stave and in warm water, not too hot. This incre the elasticity of the rubber, and the cck Iction can be easily made where it seem har possible before.

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A TIP IN FILLING CAPSULES.

Clyde S. Leslie, Ewing, Mo.: In dispensing powders that are to be put into capsules, such as Dover's, quinine, etc., often there is hardly enough powder to completely fill each capsule. By simply catching the capsule between the thumb and forefinger, pressing it lightly and rolling it, the powder can be forced into each end of the capsule, apparently filling it, thereby giving it a much neater appearance than it would have partly filled.

A QUICK STRAINER.

S. T. McGee, South Berkeley, Cal.: In straining a liquid, I have found it very convenient to fasten the cloth to the sides of the funnel by means of three or four spring-clasp clothes-pins. These pins hold the cloth up well, thus giving fullest speed to the straining and saving the time of fastening cloth to a frame and holding it above the funnel.

Radium Treatments.—

Radium treatments by emanation have arrived at the stage of a special apparatus, recently exhibited before the British Pharmaceutical Conference by Gardner & Elias. Radium emanations, which are gaseous and do not penetrate the skin, are absorbed through the lungs, and are being employed for the treatment of gout and rheumatism. The emanations are rapidly eliminated, usually passing out of the body in an hour or two after treatment. Radioactive water, used as baths, continental mud-baths, etc., owe their effects to radium emanations which are absorbed entirely through the lungs.

Radium radiations, which differ from emanations in being solid instead of gaseous, will penetrate the skin and are employed by exposing the parts to the action of radium salts, usually the bromide. It is calculated that 1 grain of radium bromide emits about 10,000,000 alpha particles per second, and about a quarter as many beta particles. The latter have a velocity of about 170,000 miles per second and penetrate the skin readily. These are used in the treatment of epitheliomas, cancerous growths, etc., and require only thin metal screens in applying to prevent the destructive action of the alpha rays on the tissues. Their value is not yet fully established.

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LETTERS distinct
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SOME OF MY EXPERIENCES WITH CLERKS.

To the Editors:

Personally, I enjoy the "experience" talks by brother druggists in the columns of the BULLETIN more than anything else. So here goes:

My first clerk was an old man who knew nothing about the drug business, but he was energetic and a good "mixer" and prompt and reliable. He was a retired farmer, had plenty of money, and simply worked for me as a matter of accommodation to me. He was quick about waiting on trade, good about keeping things clean, and a model clerk but for one thing. He was a natural-born crank. He had ideas of his own, and, while he was generally right in his contentions, he was too pronounced in his assertions. He would argue with any one over anything and carried it to extremes, making many people "sore." I kept him over a year, but had to let him go.

My next clerk was a boy who had never had any experience in store work of any kind. He had just finished high school and was green as grass, but was a good worker. He wasn't of much account for some time, but gradually caught on and became a good clerk. He was energetic, sober and reliable, and was a good stock-keeper and pleasant to the trade. He stayed with me for about three years, finally leaving to enter a business college. Later he took a course in a pharmacy school. He is now running a store of his own in Kansas City, Mo., and is doing well.

One clerk I had was a man 40 or 45 years old, of rather prepossessing appearance, and with some four or five years' experience as a drug clerk. He was industrious and reliable, but of a peculiar disposition, hard to get acquainted with, and slow to make friends. I kept him only three months and had to let him go, as he was losing trade for me instead of making it. When I told him I would have to let him go he could hardly believe it, and the tears came in his eyes as he asked me why. I told him.

Another clerk I had pulled off the society stunt. He had not been in town a month until he was "in" with the best people in the town, went to all the swell dances, receptions,

etc., and generally flew high. He was a good clerk too, but he couldn't keep up with his salary, or rather his salary couldn't keep up with him.

At the end of a few months he was a month ahead of it. I told him he was going too strong several times, but finally I had to let him go, as I could not pay him enough to keep up his gait. He did not ask for an increase, but seemed to think it was all right to draw ahead as far as he wanted to.

Then I had another clerk, a good druggist too, who could fill any prescription and make up any preparation and was reliable in every way. But he would never clean a window or a show-case unless he was told to. He seemed to think it was not his business to put things on the order book or straighten up anything. I put up with him for over a year. Then he got an offer of more money at another store and I let him go. He only stuck there a few months, and has worked in a dozen places since.

One clerk I had was a nice looking young man, of good family, and well recommended. He was a pleasant, sociable fellow, a good mixer, kept good company, and made friends for the store. I congratulated myself on having a really good clerk.

One morning he failed to show up at the accustomed hour. He sent word that he was sick and could not come on until after dinner. About noon one of the boys came in and said: "That clerk of yours was on 'a big hurrah' last night."

I could hardly believe it, but when his folks came in and asked where he was and said he had not been home the night before, I concluded there must be something to it.

He didn't show up that afternoon nor the next forenoon, but after dinner he came in, looking very much the worse for wear and very dejected and humiliated. He put up a grand-stand talk that he had never done such a thing before in his life, never would again, etc.

I told him there was no use. He couldn't work for me any more. That night his folks came in and put up such a strong plea that I relented and told them I would give him another chance.

He came back the next morning and went to work as if nothing had happened and gave good satisfaction for about two months. One

night—it was his night to close up—he was at the store by himself, and the next morning I noticed the sales were made up very irregularly. While I was trying to straighten them out, a young fellow, a friend of mine, came in and said: "Bill got me to make up the sales for him last night. He was shot up again. He asked me not to say anything about it, but I couldn't understand about making up the sales and I thought I had better come around and tell you about it. The money is all there."

This time he didn't "come out of it" for three days. I didn't expect him to return to his job, but he did. I told him there was absolutely no use. Again he made all kinds of promises, but I told him he was wasting his breath. His folks came again and pleaded for the poor boy, and he was with them and "turned on the water works," but to no avail.

They said he had an offer from another drug store up the street, but they would rather he would work for me. I told them, "By all means let him take the job," but I noticed he didn't. He is now making good on a farm, out of the way of temptation.

One clerk fooled me decidedly. His folks wanted me to give him a try-out, and as I was short of help at the time I put him on. He had had two or three years' experience and knew the business well—that is, the theory end of it—as he was a graduate of a college and also had just finished a course in a pharmacy school. He was a good stock-keeper, kept things up in good shape, was always cleaning up, and punctual and energetic to a fault.

There was one trouble with him, though. He always met a customer with a grin on his face, and his attempts to be pleasant were really pathetic. He tried so hard to be nice to everybody and to make a good impression that he overdid it. Everybody got to calling him "grinny," and he didn't take at all. I kept him three or four months, but had to let him go. He got a job in another town and took the State examination and passed with a high grade.

He is now manager of the largest drug store in the largest town in the State. I was certainly fooled in him.

Then I had another clerk who was with me nearly four years and was a good one too, but developed a fondness for the "spts. vini rect.,"

and I had to let him go. He simply got so he could not leave alcohol alone.

I don't believe that I am hard to work for. In fact, I think I am too easy, but it does seem to be a hard job to get a satisfactory clerk. If you get a really good one, one you want to keep, he gets an offer somewhere that you can't meet. There are so many that start out fine but soon fizzle out.

AN OLD PILL-ROLLER.

SOME VIEWS ON THE GRADUATION PREREQUISITE.

To the Editors:

There are reasons for not making a college course a prerequisite. Comparing pharmacy with the medical, dental, and veterinary professions, there is a real need at least among medical students for a college course. They must learn the anatomy of the human body. A similar rule applies to the dentist and veterinarian also. But the pharmacist need not know all about the human system to be able to compound and dispense medicines accurately. We druggists know well that the only way one can learn pharmacy is to get right down and dig it out himself. A man might stay in a college of pharmacy until his hair is white, but without active practice he can never master the work. The average drug store has nearly all the facilities one needs with which to study pharmacy, and with a little added expense one can equip himself well enough to carry on any experiments he may desire. And this work, coupled with the drug experience, affords in my estimation a better training than the college where one gets theory only. Neither the doctor, dentist nor veterinarian can accomplish so much in an office.

As to the efficiency that may be attained without a college course, we need not say much about that. It has been well demonstrated, too often to be doubted, that a prerequisite requirement is not entirely necessary. I personally know a few men who never attended a college, but have held positions behind the prescription cases of some of the best drug stores in the United States.

Again there are many boys who enter the drug stores and make excellent druggists, who would be barred from the profession if they had to go through college, for the reason that they have not the necessary funds. A gradu-

ation prerequisite would exclude from the profession many of our best pharmacists. So I say give everybody a chance. True, a college course is beneficial and makes the road easier. I admit that one can never learn too much about the profession. But a young man with ambition can acquire the necessary training outside of a college of pharmacy.

We have our State board, which can make the examination sufficiently rigid so that those who pass it must be competent. And so long as one is able to do the work what difference does it make whether he obtained his training in a college or a store? It is all up to the individual. A prerequisite requirement will exclude many boys from the profession, and, secondly, in view of our State boards, which are competent, such a law is unnecessary.

Eastman, Georgia.

B. I. BRANTLEY.

HE DOES BELIEVE IN FIVE-CENT SALES— A LITTLE ARGUMENT.

To the Editors:

In your August issue, among the "Letters," I noticed an article entitled "Doesn't Believe in 5-cent Sales."

Without giving offense to the writer, I venture to say that even though he did not sign the name of the city in which he resides I would have known he hailed from one of the larger cities—that is, one over 30,000 inhabitants.

Just such ideas as he expresses tend to make the public look upon the pharmacist as an independent, fast-money-making individual. Every other business—mind you, *business*, not profession—deals out 5 cents' worth of material if wanted.

During my short experience of sixteen years in pharmacy, in a city of 25,000, I have found that 5-cent sales are money-makers *indirectly*. Treat a 5-cent customer right and you get the 25-cent, 50-cent, and dollar sales when he wants them.

Give a customer wishing 5 cents' worth of anything, just 5 cents' worth and no more, and the next time he will buy a larger quantity. I can name a number of grocers and men in other lines of business who have made good dealing out and *cheerfully* filling 5-cent orders. I don't mean to encourage 5-cent sales, but I treat the buyers right and sell 5 cents' worth when asked for it. That sen-

tence of Junius Pestle, "Cut out 5-cent sales," rings false.

The pharmacy proprietor, not always the clerk, looks with disdain on 5-cent sales. No one realizes more than the clerk the hard task of selling a \$9.00 a dozen patent, wrapping it, and delivering it, all with a pleasant face, to a customer for 77 or 78 cents, leaving a profit of 2 or 3 cents. Drill your clerk (take it from a clerk like myself) to treat all customers properly, 5-cent ones preferred.

Mr. Junius Pestle, let me suggest that you try a 5-cent window trim some time. My boss looked upon it as all wrong. One day, while he was away, I filled our windows with articles selling for 5 cents—no more. Among them were toothpicks, ink, court plaster, vaselin, mucilage, soaps, ripans, nursing bottles, paper drinking cups, a job lot of talcum, and toilet paper—one or two of each. You could find many similar odds and ends in your store. Each group had a 5-cent tag on it. In the center of the window I placed a large card: "Any Article 5 cents."

The display brought many new customers. One said, "Well, I never knew you carried Coal Oil Johnny Soap. I'll take three cakes." Another said, "A bottle of ink, please." At this point the good, pleasant clerk steps up and with tact and a smile suggests a tour of the stationery counter, showing the excellent line of paper, pens, pads, etc.

Just try it and see!

Like any window trim, such a display doesn't always sell goods on the spot, but suggests sales that materialize later on. Many of our window trims have attracted people who did not purchase at that moment, but later. Send 50 people to our store for something worth five cents, and I am certainly a poor salesman if I don't sell 5 or 10 cents' worth more to 25 out of the 50.

If a customer asks for *some* Epsom salts, or Castile soap, Mr. Clerk ought to, I agree, say "Ten cents' worth?" or "A ten-cent cake?" But if a person wants 5 cents' worth, give it to him. Try it. But do it pleasantly, not as though you were doing one a favor. You will find that most clerks, experienced clerks, will do that; but I have noticed that the proprietors, some of the get-rich-quick kind, hate to make 5-cent sales, and they certainly show it, too!

I hope that pharmacists will wake up to the

fact that 5-cent sales—that is, all small sales—made right, will or do invite larger sales, and that more good-will, and in the end profit, comes from them than from some of the larger sales.

"THE CLERK."

WHAT IS YOUR METHOD OF DISPENSING PRESCRIPTIONS?

To the Editors:

Will you not have readers of the BULLETIN OF PHARMACY submit sets of rules such as govern the filling of prescriptions in their stores? Routine and system are essential in the prescription room. A few sets of rules actually in operation would be of greater assistance than years of experimentation and resultant changes. Incidentally let me ask: When is the best time to write the prescription label—before filling the order or afterwards?

In order to make it perfectly clear what I mean, I am submitting herewith a set of rules suggested by a druggist of many years of successful experience:

RULES GOVERNING THE COMPOUNDING OF PRESCRIPTIONS.

- 1st. Read the prescription carefully.
- 2d. Write the label or labels therefor, affixing date to same.
- 3d. Select the ingredients entering into the prescription, together with container.
- 4th. Compound and finish off,
- 5th Call back prescription from memory to some qualified person in attendance, who will verify same, affixing his initial or number thereto.
- 6th. All active poisons must be verified as to kind and quantity by a second person in attendance.

Now I wish you would please ask your readers to submit rules of this kind which they have developed out of their experience, and which they have found to be useful in the prescription room. Hoping to get something good from this stirring up, and wishing the BULLETIN every success, which it so richly deserves, I remain,

W. C. M. SCOTT.

Detroit, Mich.

[NOTE BY THE EDITORS.—Mr. Scott's suggestion is a good one, and we certainly trust that our readers will avail themselves of this invitation and send us a number of contributions on the subject. Let us hear from you for the benefit of the craft! The more responses we get, the better we shall be satisfied.]

DEALING WITH THE DISPENSING DOCTOR.

To the Editors:

I notice that a great deal has been said lately in the columns of the pharmaceutical journals concerning dispensing by physicians and prescribing by pharmacists.

The custom of dispensing by physicians has prevailed in this section of the country for so many years that most druggists have come to accept it as an unalterable condition; but I have found that I could alter the condition to a great extent. My plan has been to not fight the physicians, but to try to convince them that it is to the mutual advantage of physician, patient, and druggist that they dispense as little as possible, and have their prescriptions filled at the drug store whenever it is practicable.

It is useless to expect a physician to send his patients twenty miles to a drug store to have a prescription filled for calomel powders; but I have had quite a number of prescriptions for such things as suppositories, emulsions, etc., brought to me by patients who live fifteen or twenty miles away. One of my physician friends uses his medicine case for emergencies only. He gives a patient something from his case to do until the patient can send to the drug store and have a prescription filled.

A patient once asked this physician why he did not dispense his own medicines himself. He rather tersely replied that when he dispensed his own medicines he gave the patient what he had; when he wrote a prescription he gave the patient what the patient needed.

I once bought out the stock of a dispensing physician, and had to throw away more than half of his stock as it was no good. Poor man! He had no idea why he did not get the results which he expected from his medicines!

So I say that if a physician can be so blind to his own interests as to dispense worthless preparations, why let him dispense them!

B. O. BERRY.

Saint Matthews, South Carolina.

TWO MORE LETTERS ON DISCOUNTING BILLS.

To the Editors:

We take advantage of all cash discounts that are offered.

Figuring the discounts on various lines, we find that they average one per cent.

The discount on drugs, patents, etc., is one per cent thirty days. On sundries we are allowed one to five per cent, but as the time is sixty to one hundred and twenty days, the discount averages one per cent. Or one per cent ten days or thirty days net means twelve per cent per year. This only goes to show that it pays one to avail himself of all cash discounts even if he must borrow the money to do it.

I have figured up our cash discounts for 1910, and they were ninety dollars at an average of one per cent. There were a few bills we did not discount, but very few. We discounted all our drug and sundry bills. The discounts paid three-fourths of our freight and drayage, and were we nearer the wholesale markets would pay them all.

I am a firm believer in the discounting of bills. It not only pays financially but in other ways. It is one of the best "references" one can have when opening an account with a firm to whom he is a stranger. For example, I get an invoice dated February 1 of fifty dollars "1 per cent ten days or thirty days net." I pay February 10 and add 50 cents to my profits. If on the other hand I had paid the bill on March 1 it would have cost me 50 cents for the use of that money twenty days. Pretty big interest! And I dare say in a majority of cases the money has laid in the safe or the bank. And I think further that taking thirty, sixty, or ninety days is more of a careless habit than good business. Perhaps it was easier for me because I got the cash discount habit from the start. The twelve per cent per year appealed to me.

Traverse City, Mich.

C. A. BUGBEE.

To the Editors:

We discount all bills. Thus we save from $\frac{1}{2}$ to 5 per cent.

Our capital is \$26,000, and we pay one or two per cent dividend with what we save in discounts. Druggists are certainly justified in borrowing money for the purpose of taking advantage of all discounts. We probably save in actual cash \$500 or \$600 a year.

Detroit, Mich.

F. W. R. PERRY.

INGENIOUS SPELLING!

To the Editors:

The accompanying note was sent to a drug store in Coshocton, Ohio, and may be interest-

*Doctors hoofbees
feal Mail fulls*

ing enough to use in the BULLETIN. It isn't very difficult to make out, but it struck me as being amusing.

W. H. MCKIBBEN.

RED INK FOR EXTERNAL PREPARATIONS.

To the Editors:

Here is a little suggestion for readers of the BULLETIN. I always use red ink for writing labels to be used on external preparations. Some druggists have their labels printed in red for external preparations, but this means duplication and expense. It seems to me that the writing of the labels in red ink serves the same purpose.

Eastman, Ga.

B. I. BRANTLEY.

To the Editors:

At this time I desire to add my praise for the best up-to-date drug journal that I receive, which is due in part to its progressive ideas and its systematic classification of subjects.

Youngstown, Ohio.

JAMES L. ANLIS.

* * *

To the Editors:

Since my graduation day in 1902 I have never been without your journal, and consider it "the real thing." It's "breezy," carries the real "dope," and prevents one from getting "rusty" north of 53° or south.

Fairbanks, Alaska.

W. MOLTZEN.

* * *

To the Editors:

The BULLETIN is, I think, the best pharmaceutical journal published, and I always look forward to its coming at the beginning of the month with interest.

W. R. BORNEMAN.

Mahanoy City, Pa.

BUSINESS HINTS

Pushing Shaving Supplies.—

It seems that the barbers in New Ulm, Minn., raised the price of a shave from ten to fifteen cents. The high cost of living no doubt accounted for this move, but nevertheless the rise in the cost of tonsorial service meant business for the drug store. Eugene A.

Price of Shaving Reduced

Why pay 15c. for a shave when by owning one of our new up-to-date Safety Razors you can shave yourself for a PENNY or even less,

Besides the saving of money you also will be able to Save Time, as then there will be no more long waiting for "N-E-X-T"

When you own a Safety you can shave yourself when YOU feel like it; be it early morn or late at night—It's all the same to Mr. Safety—He don't care when or how often you use him—He will always be ready at your every call, willing to give you the cleanest, most sanitary shave that your face ever enjoyed.

We handle all the standard makes of Safety Razors.

Durham Duplex Leslie Gillette
Auto Strip Ever Ready Etc.

Prices from \$1.00 to \$5.00 each.

We will be willing to let you have one on Trial just to show you what comfort there is in shaving yourself.

Also all necessities used in shaving.

The best of everything to be found at

Eugene A. Pfefferle's

Reliable Drug Store.

Pfefferle was not slow to see the chance. He at once came out in the *New Ulm Review*, a local paper, with an eighth page ad., surrounded by a heavy black border, announcing a full line of shaving supplies. That this bit of opportune advertising brought business to Pfefferle's Pharmacy goes without saying.

Teddy in the Window.—

Our attention has recently been directed to a rather unusual window display arranged by E. H. Smith,



1932 W. Superior Street, Duluth, Minn. Standing out conspicuously in the middle of the window appear a pair of glasses over a set of shiny white teeth. Just

beneath the white ivories rests a sign, "Delighted with Euthymol Tooth Paste." The whole idea is simple but exceedingly unique, and must have attracted attention to the tooth-paste on display.

Two Artistic Calendars.—

Alf J. Shilling, 36th and Cottage Grove Ave., Chicago, gives no little thought to his advertising. Among other things Mr. Shilling is in the habit of sending out monthly calendars to his customers. Two of them are reproduced in the accompanying engraving. The originals were $4\frac{3}{4}$ inches long and 10 inches wide.



Unfortunately the color effects are lost in the engraving, but the illustration will serve to indicate the artistic nature of the calendars. The paper was a white cardboard stock, the lettering being done in red and green.

A Post-card Envelope.—

Port-cards are commonly sold in envelopes, the idea being to keep them clean. Messrs. Wilkinson & Co., of Keokuk, Ia., use an envelope $6\frac{1}{2}$ by $3\frac{3}{8}$ inches in

ARE YOU PARTICULAR ABOUT YOUR TALCUM POWDER?

You can afford to be if you buy talcum powder and toilet goods here. We have every kind of talcum powder that is worth having, and our stock is always fresh, as we buy direct from the manufacturers and our large daily sales make "getting stale" impossible on our shelves. We guarantee everything you buy here to be perfect, and if you don't find it so we will gladly refund your money. Our large stock affords you the pleasure of buying just what you want and not being asked to take something you do not care for.

WILKINSON & CO.

KEOKUK'S BIGGEST, BUSIEST, AND BEST DRUG STORE
422 MAIN STREET

dimensions. The paper is of a comparatively thin, light yellow stock, and bears their ad. We are reproducing one of the envelopes which carries a talcum powder announcement.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Show-case Items.—

Sodium naphthenate is said to increase the detergent and lathering power of hard soaps, and also to be strongly disinfectant.

Petroleum oil is found in 22 States. Pennsylvania leads with 2000 square miles of oil-bearing land. Indiana has 1000 square miles, and California 850. Idaho comes last with only 10 square miles.

Professor Zsigmondy says that fish bladder is superior to parchment or to collodion as a dialyzing medium.

Dr. McCollum, of the University of Wisconsin, says that the taste or flavor of a diet is found to have an important influence on its digestibility; a tasteless diet which contains all necessary nutrients being practically worthless for maintaining health and vigor.

A German chemist says that acacia which has been obtained by evaporating a filtered solution dissolves very quickly in water and produces a clear and permanent mucilage.

The active principle of insect powder is pyrethron, an ester of pyrethrol. It is highly poisonous to insects and fish, but not to higher animals.

Corn-stalks are a profitable source of sugar in Europe. They contain from 1.5 to 10 per cent of sucrose, and the sugar can be obtained in pure form.

"Anise bark oil" is distilled from the bark of the avocado pear. It has an odor and flavor resembling that of anise.

China and Japan have cultivated and used soy beans for centuries, but until within two years the rest of the world regarded them as a curiosity. Now it is exported in large amounts and its use is rapidly increasing.

The solubility of solids in water is increased by pressure, but the increase is so slight as to be of no importance except for most exact work.

A perfect solution of starch gives a violet wine color with iodine, a pseudo-solution gives the characteristic blue, and the insoluble particles a bluish-violet.

An alcoholic extract of the peel of red radishes is said to yield an indicator for acids and alkalies more sensitive than phenolphthalein.

House flies have been fed on a mixture of sugar and strychnine, and the strychnine had no effect on them.

Faded writings, if made with iron ink, may be restored by brushing with either a solution of tannic acid, or of ammonium sulphide.

Crystals of sodium nitrate are obtained pure enough to be used in optical instruments in place of Iceland spar.

Yeast is stated to be a good food—when deprived of its bitterness. It contains 48 per cent of digestible protein, and 75 per cent of its energy is utilized. It is one of the most concentrated of foods and one of the richest in protein.

The largest vessel yet made of silica is a 50-liter jar, 2½ feet high and 12 inches in diameter. Silica

is very difficult to work, but it is much superior to glass for chemical operations.

Preserved Gentian.—

Preparations are made in Europe of fresh gentian root by dialyzing two to three weeks in 60-per-cent alcohol. The fresh root contains more gentiopicroin than the dry, it being changed during the drying by action of the ferments in the root. And E. Bourquelot says that by extracting fresh gentian, kola, aconite, digitalis, etc., with hot alcohol, not only is a larger yield of active principles obtained, but a purer and more permanent extract is secured.

BOOKS

SCHIMPF'S ESSENTIALS OF VOLUMETRIC ANALYSIS.

The favor with which the first edition of this book has received has encouraged the author, Henry W. Schimpf, Ph.G., M.D., Professor of Analytical Chemistry in the Brooklyn College of Pharmacy, to revise and enlarge it. The volumetric methods are arranged in a systematic manner comprising alkalimetry, acidimetry, precipitation, analysis involving the use of silver nitrate, sodium chloride and potassium sulphocyanate. Oxidation methods are given involving the use of permanganate, dichromate and iodine. There are reduction methods also in which the analyst employs sodium thiosulphate, arsenous acid and stannous chloride. In addition are given concise descriptions of methods for assaying alkaloidal drugs, phenol, oils, sugars, formaldehyde and alcoholic liquids together with a few simple gasometric analyses such as the pharmacist may find useful. The book contains 360 pages and costs \$1.50 in cloth. The publishers are John Wiley & Sons, New York.

A COLLEGE CLASS BOOK.

The college class book gotten out by the class of 1911 of the Philadelphia College of Pharmacy is about the cleverest thing of the kind we have ever seen. The most unique and interesting feature is a collection of portraits and personal sketches of the members of the class themselves. The brief descriptions given of each student are full of humor and would do credit to *Life*. For the rest, the book contains interesting articles on the different departments of college work, the various fraternities, college clubs, athletics and the like. We are pleased to note incidentally that the cartoon of Professor Remington which appeared in the *BULLETIN OF PHARMACY* a year ago has been reproduced in the volume. The editors of the book were H. L. Lemien, J. C. Winter, and Elias Shaker. The business manager was Charles Muthig, who was assisted by A. F. Greaves and F. O. Patton. The book is handsomely printed on heavy glazed paper and is beautifully bound in flexible leather. The title is "The Graduate."

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Talcum Powders.

K. J. wants several formulas for talcum powders.

Talc when used as a toilet powder should be in a state of very fine division. Antiseptics are sometimes added in small proportion. For general use the talcum alone is the best. As a perfume, rose oil may be employed, but on account of its cost, rose geranium oil is probably more frequently used. A satisfactory proportion is $\frac{1}{2}$ drachm of the oil to a pound of the powder. In order that the perfume may be thoroughly disseminated throughout the powder, the oil should be triturated first with a small portion of it; this should then be further triturated with a larger portion, and if the quantity operated on be large, the final mixture may be effected by sifting. Many odors besides that of rose would be suitable for a toilet powder. Ylang-ylang would doubtless prove very attractive, but expensive.

The following formulas may prove useful:

BORATED TALCUM POWDER.

- | | |
|---------------------------|----------------|
| (1) Talcum..... | 14 ounces av. |
| Boric acid..... | 2 ounces av. |
| Oil of rose geranium..... | 2 fluidrachms. |

The talc and boric acid should be in the finest possible powder and should be passed through a fine sieve.

VIOLET TALC.

- | | |
|--------------------------|----------------------|
| (2) Powdered talc..... | 14 ounces. |
| Powdered orris root..... | 2 ounces. |
| Extract of cassia..... | $\frac{1}{2}$ ounce. |
| Extract of jasmine..... | $\frac{1}{4}$ ounce. |

ROSE TALC.

- | | |
|-------------------------|-----------------------|
| (3) Powdered talc..... | 5 pounds. |
| Oil of rose..... | $\frac{1}{2}$ drachm. |
| Extract of jasmine..... | 4 ounces. |

BORATED APPLE BLOSSOM.

- | | |
|--------------------------|------------------------|
| (4) Powdered talc..... | 22 pounds. |
| Magnesium carbonate..... | $2\frac{3}{4}$ pounds. |
| Powdered boric acid..... | 1 pound. |

Mix.

Carnation pink blossom (Schimmel's).....2 ounces.
Extract of trefle.....2 drachms.

To 12 drachms of this mixture add:

Neroli.....1 drachm.
Vanillin..... $\frac{1}{2}$ drachm.
Alcohol to.....3 ounces.

Sufficient for 25 pounds.

A Case of Hog Poisoning.

B. and E. submit a communication of a very unusual character: "One of our customers," they write, "mixed up a combination of equal parts of wood ashes, sulphur, salt and air-slaked lime and fed the mixture in a dry state to his hogs, allowing them to eat as much as they liked. In a few minutes sixty head were dead. Can you give any reason for this?"

Even the hair on the swine would scrape off easily after they had been lying only about an hour. It was noticed that when the living pigs climbed over the carcasses to get at the trough to feed, their feet scraped the hair off the dead animals."

A stockman informs us that he has fed a mixture of wood ashes, salt and charcoal to his pigs, allowing them to eat all they wanted, without any bad results. But the mixture mentioned in the foregoing paragraph we regard as extremely deleterious, owing to the presence of the sulphur and lime. These two substances enter into some sheep dips, and it is notorious that when the animals swallow the lime and sulphur solution they not infrequently die.

Why the hair should fall out is a little bit hard to explain. Locally the alkaline sulphides are used as depilatories, and it may be that a combination of lime and sulphur taken internally in large amounts exerts a similar effect. That, however, is pure conjecture.

Rust Stains on Fabrics.

J. S. wants a formula for removing iron rust from linen. The following preparations are suggested in the literature:

1. By adding two ounces of cream of tartar to 1 part of oxalic acid, ground fine, and kept in a dry bottle, you will find, by applying a little of the powder to rust stains while the article is wet, that the result is satisfactory. Wash out the stain in clear warm water to prevent injury to the goods.

2. Dissolve potassium binoxalate, 200 parts, in distilled water. 8800 parts; add glycerin, 1000 parts, and filter. Moisten the rust or ink spots with this solution; let the linen, etc., lie for three hours, rubbing the moistened spots frequently, and then wash out well with water.

3. Soak the stains in a solution of tin chloride, and rinse immediately with much water. The tin salt is much more reliable in removing iron rust and quicker in its action than oxalic acid, unless the stains are soaked in a solution of the latter, contained in a tin spoon, when the stains disappear in a short time.

4. Iron rust may be removed by salt mixed with a little lemon juice.

Preserving Fruit Juice.

G. G. S. asks: "What is the most harmless and surest preservative that can be used equally in preserving unfermented grape juice, pear juice and wine? Kindly give the quantity of preservative to be used in 10-gallon lots of juice."

Unfermented grape juice if properly sealed and sterilized will keep without any preservative. There is a precipitate of crude cream of tartar which leads some to age the product two years before using. Instead of the muddy purple color of the comparatively fresh product, after aging the fluid is clear. If fermentation has already set in, add salicylic acid 1/700 dissolved in alcohol. This last is contrary to the law in many States, and can be used only in preparing grape juice for home consumption. Wine should require no preservative as the alcohol present will inhibit the growth of germs. But cheap wines deficient in alcohol may require a preservative. As for pear

juice, if it tends to ferment add one-tenth of one per cent of sodium benzoate. Ten gallons of juice would require $1\frac{1}{4}$ ounces of the sodium benzoate.

Painting Heaters or Radiators.

D. D. Co. writes: "A customer of ours having polished and painted a heater times too numerous to count, and not being able to use anything so far that the heat would not peel off the first time a fire was made, appealed to us for something. We suggested aluminum enamel, black paint that plumbers use for painting smokestacks, and several other things, all to no avail. So we in turn ask you for a formula to make the polish or paint stick, or to suggest something that will do, if you possibly can."

The querist's trouble lies in the lack of proper preliminary treatment. One must first cover the iron with a heavy coat of iron filler. The Tiki brand made by the Acme White Lead Works of Detroit is very good. Thin the iron filler with turpentine so that it may be spread with a brush. After 10 or 12 hours, when the filler has dried, add bronze or a paint mixed with turpentine only (no oil). One can use a prepared aluminum or prepared bronze. This will stick every time in spite of the heat.

Canning Vegetables.

C. J. H. C.—We do not know the composition of the proprietary canning powder which you mention. The best preservative for vegetables, as far as we know, is sodium benzoate in the proportion of one-tenth of one per cent. In some States, however, food products so preserved could not be sold without violating laws. If they are properly sterilized, canned, and sealed, vegetables should require no preservative. Cannerymen are in the habit of putting a pin-hole in the cans and then subjecting them to moist heat until steam comes out of the perforations. When the containers have acquired that degree of heat, the holes are sealed with solder and sterilization is complete. But in the home, if the lid is screwed down imperfectly the vacuum created upon cooling allows air to enter by atmospheric pressure from without and germs come along with it. Hence the mold sometimes seen on the top of canned fruit or vegetables. The subject is interesting, but reasons of space forbid our saying more about it.

Removing Tattoo Marks.

E. J. G. and E. D. C.—Tattoo marks are said to be removed by the application of a paste of salicylic acid and glycerin. A compress is applied over the paste and the whole secured with sticking plaster. After about eight days, the paste is taken off, the dead skin removed, and the application of paste repeated.

Applications of cotton wadding, soaked in chloroform and kept in place by means of a bandage, are also recommended.

As for the surgical methods involving the use of strong chemicals, we hesitate to publish them. If the tattoo marks cannot be removed by such simple procedures as we have mentioned, it would be well to consult a doctor.

Two Soda Formulas.

P. O. M. writes: "Can you give me a formula for chocolate flip? Can you tell me, too, what the name of the following drink is? The formula is this: Take one ounce of the desired flavor and one ounce of No. 20 ladle of cream. Thoroughly mix and add carbonated water until a 12-ounce glass is filled."

L. W. Hartz, an expert soda dispenser in Detroit, says that a "chocolate flip" is an egg chocolate of the following formula:

Chocolate syrup	2 ounces.
Milk or half milk and cream.....	4 ounces.
Ice.....	
Egg	1

Shake and strain. Add soda water to make 10 ounces.

There is no name for the drink mentioned in the query. But if you take any flavor and parfait it with ice cream—i.e., mix it with enough to fill a 5-ounce glass—you call it a parfait. Add about 5 ounces of whipped cream, which makes it 10 ounces.

Keeping Crude Drugs Free from Insects.

A. T.—Charles J. Fuhrmann, of Washington, D. C., says that he keeps his crude drugs free from insects in this way: He puts a 1-drachm phial of chloroform in each crude drug container. It keeps the contents free from insects and requires scarcely any attention. The evaporation through a loose cork keeps the insects away.

Murphy Williams, of Corsicana, Texas, has had good results with this scheme: Once a month regularly he pours a few drops of chloroform into each container of crude drugs. This procedure is inexpensive and kills the insects without injuring the goods. Mr. Williams makes a note on his calendar and does the chloroforming regularly on the 15th of each month.

Yellow Capping Fluid.

F. G. R.—We do not know the composition of the particular capping fluid for bottles which you mention. But the following formula should be satisfactory:

Dip the heads of bottles suitably corked, and, if desirable, provided with a tag or label pasted over the cork, into a fluid prepared with these ingredients.

Colophonium resin	20.0 parts.
Ether	40.0 parts.
Collodion	50.0 parts.
Oil soluble, yellow.....	sufficient.

The liquid varnish dries rapidly and leaves a beautiful transparent coating if made without the dye. With the addition of the dye, a yellow color should be imparted to the cap.

A Hair Tonic.

J. W. desires to know what product is called for in the first item of the following prescription:

Cantharis	4 fluidrachms.
Glycerin	1 fluidounce.
Bay rum	4 fluidounces.
Distilled water	2 fluidounces.

Sig.: Apply to the scalp at night.

The tincture of cantharides is presumably indicated. Hair tonics and preparations for the treatment of alopecia commonly contain this ingredient.

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THE MONTH'S HISTORY

MORE FAMILY QUARRELS.

The bad blood between Mr. Goddard and the Chicago Wholesale Drug Co. was in evidence again at the Niagara Falls convention of the N. A. R. D., and we have since then been treated to a continuance of the quarrel in print. Immediately following the convention, an article appeared in *The Voice of the Retail Druggist* bitterly criticizing "Zuber, White and a handful of the Chicago delegation to Niagara" for endeavoring to "make a great fuss because the A. D. S. management ran a special train from Chicago for the accommodation of members desiring to attend the A. D. S. mid-year meeting." This train was necessary, asserted *The Voice*, in order that the Chicago A. D. S. members might be brought to the meeting of their own organization in due time.

A hot reply to this editorial in *The Voice* was immediately printed in the *C. R. D. A. News*. *The News* story took up over three pages of space, and was chiefly a vigorous assault upon Mr. Goddard himself. It declared that there really was no A. D. S. meeting at Niagara; that there was nothing but a lecture given by Elbert Hubbard under the auspices of the A. D. S.; that in endeavoring to bring a special train to Niagara from Chicago Mr. Goddard was using his grievance against the Chicago Wholesale Drug Co. as a cloak to attack and disrupt the C. R. D. A.; that he wanted the Chicago votes for his own purposes; and that his real motive was "to elect a president and executive board of the N. A. R. D. of his own making."

Since this counter-attack in the *C. R. D. A. News* was published, *N. A. R. D. Notes* has added a little fuel to the flame by supporting the C. R. D. A. in its defense of Mr. Zuber. It declares that the reflections cast upon Mr. Zuber by *The Voice of the Retail Druggist* were entirely unwarranted, and that he has the entire respect not only of the C. R. D. A., but also of the official family of the N. A. R. D. Later yet we observe that President Hoelzer of the C. R. D. A., at the recent quarterly meeting, has devoted nearly all his presidential address to the situation and has handled Mr. Goddard and the A. D. S. rather roughly and without gloves.

While reporting upon these matters concerning the A. D. S., we are reminded incidentally that early last month another article appeared in *N. A. R. D. Notes* indicating that from 150 to 300 employees of the company were out on a strike. W. J. Finn, whom the press reports had called the "general manager," was said to be in sympathy with the strikers and to have resigned. W. Burnett, who was called the "merchandise manager," had apparently quit also. This trouble has doubtless been settled before now, although we have seen no later reports either in the *Notes* or the newspapers.

The developments of the last six or seven weeks would seem to indicate that Dr. H. W. Wiley has been helped rather than hurt by the recent Wiley-Rusby entanglement. Shortly after President Taft exonerated Dr. Wiley, Solicitor George P. McCabe resigned from the Board of Food and Drug Inspection. It was he who had apparently been mainly responsible for bringing the charges against Dr. Wiley, and since the President dismissed the charges, there was nothing manifestly for McCabe to do but to withdraw, particularly since there had been a good deal of bad blood between the two men, and it had been shown in the congressional investigation that they could not work together harmoniously and with satisfactory results in the administration of the food and drugs act.

The man selected to succeed McCabe on the Board of Food and Drug Inspection was Dr. Doolittle, who has for some time had charge of the government drug laboratory in New York. It was understood that Doolittle was Wiley's choice and that the two men would work together.

Dr. Dunlap, the third member of the board, who was apparently more in sympathy with McCabe than with Wiley, has left Washington on a leave of absence. But in any event, even if he returns to his work on the board, he will now be in the minority. Meanwhile, however, Solicitor McCabe, although no longer a member of the Board of Food and Drug Inspection, is still the solicitor of the Department of Agriculture, and in this capacity he is vested with the power under a special law of deciding whether a given case under the food and drugs act shall or shall not be reported to the Department of Justice for prosecution. To this extent it would appear that he still serves as a check upon Dr. Wiley, although no one seems to know just how much power he will continue to be given by Secretary Wilson. One day the newspapers report that the secretary still "has every confidence in the solicitor, and intends by all means to retain him with authority undiminished." The next day the story is that McCabe will no longer be permitted to impose any restraints upon Dr. Wiley, and that from now on Wiley will be "it." So there you are!

It would seem, however, that the present settlement of the interdepartmental differences

is merely temporary. There is a general conviction that when the President gets back to Washington, and particularly after the Congressional Committee has rendered its report in December, some improved system of administering the food and drugs act will be worked out—a system, of course, in which Dr. Wiley will retain a prominent if not the leading part.

* * *

WITH THE JOBBERS.

Much of value and importance developed at the meeting of the National Wholesale Druggists' Association in New York City during October, but unfortunately our space prevents us from going very much into detail. One of the most interesting discussions was that caused by the statement of the Committee on Credits and Collections that there were far too many jobbing salesmen in the country, and that the number should be cut down by 25 to 50 per cent. Everybody was agreed that the orders were getting smaller and smaller, and that they were being parceled out among a larger and ever larger number of travelers, but no one seemed to have much faith that there was an effective remedy for the situation. A committee, however, will study the problem and report next year.

One of the ablest reports was that submitted by the Committee on Legislation. Among other things it was declared that both the Mann and the Foster congressional anti-narcotic bills were open to serious objections, and that a compromise measure should be drafted by the N. W. D. A. and its introduction sought. It was voted to draft such a bill. The position was also taken in the report of this committee that the so-called "variation clause" of the food and drugs act was of great importance, should by all means be retained, and that, moreover, there ought to be no amendments to the food and drugs act until there had been further judicial interpretations to indicate just what the present law means. A resolution to this effect was adopted.

The Committee on Proprietary Goods expressed in strong terms its disapproval of the "prescription proprietary." It also took another fall out of the coöperative buying movement, but expressed the opinion that this movement had not progressed during the past year, and that if anything it had lost ground. A resolution was subsequently adopted calling

upon manufacturers not to furnish their goods to coöperative concerns, the argument being that the manufacturer must look to the regular jobber for his main support and should not use him as a mere convenience.

Of particular interest to retailers was the presence of Prof. Joseph P. Remington at the convention, and his speech on progress in pharmacopœial work. Professor Remington declared that he would be pleased to tell when the next U. S. P. would be published if he knew himself. One of the interesting bits of information in his address was the statement that Dr. Wiley and Dr. Kebler, now that some changes had been made in the Department of Agriculture as the result of the recent upheaval, would probably be able to resume their pharmacopœial work.

The new president of the N. W. D. A., Theodore F. Meyer, is made the subject of mention elsewhere in the present issue of the BULLETIN. J. E. Toms was of course re-elected to the secretaryship, and Samuel E. Strong to the treasurership. Charles Gibson was again made chairman of the Board of Control, and William P. Richey chairman of the Committee on Proprietary Goods. Frank E. Holliday remains the "general representative" of the N. W. D. A.

Next year's meeting will be held in Milwaukee during October.

* * *

OUR GERMAN-AMERICAN CONFRERES.

New York City boasts of a pharmaceutical association which, despite its remarkable history, has perhaps been little known and appreciated elsewhere throughout the country. We refer to the German Apothecaries' Society—the *Deutsche Apotheker Verein*. The Verein celebrated the sixtieth anniversary of its foundation on the evening of September 28, when a Fest-kommers was held, and as well on October 12, when there was a banquet and ball attended by the ladies. A historical sketch of the society, prepared for one of these occasions by Dr. W. C. Alpers, and written in that eloquent and inspiring vein for which he is well known, was contributed to the October issue of the *Druggists Circular*.

From this sketch we learn that the Verein is the oldest pharmaceutical society in the United States. It even antedates the venerable A. Ph. A. by one year. Following the

failure of the Republican Revolution in 1848 in Germany, hundreds of educated Germans flocked to this country, and in 1851 twenty-five German apothecaries in New York City formed a society primarily for social and fraternal purposes. The membership and ideals of the organization rapidly developed, however, until now Dr. Alpers is able to say, looking back over the ensuing 60 years, that there has been no general movement in pharmaceutical matters in which the Verein had not taken an active part, while in many a cause it had been the acknowledged pioneer.

In 1852 it prepared a formulary manual which ultimately evolved into the National Formulary. In 1859, realizing that pharmaceutical education practically had no existence in New York, it appointed a committee which instructed and examined young men in various branches of study. In 1871 and '72 it led the fight against a vicious pharmacy bill and secured the enactment of a law satisfactory to the pharmaceutical interests—the first pharmacy law placed on the statute book of the State. In 1874 it prepared a comparative compendium of the preparations of German and United States Pharmacopœias, and thus did pioneer work in the direction of an international pharmacopœia. In 1890 or thereabouts it instituted an agency for the legal protection of its members against blackmail. Later on it caused the establishment of a buying club, which ultimately resulted in the formation of the New York Consolidated Drug Co. These and other achievements have been registered by the Verein, and the society has an organ of its own in the *Deutsche Amerikanische Apotheker Zeitung*, the management of which rests in the capable hands of Hugo Kantrowitz.

Hoch der Deutsche Apotheker Verein!

* * *

THE N. A. R. D. AND SUNDAY CLOSING.

Mrs. Emma Gary Wallace, of the *Era* staff, addressing the N. A. R. D. convention at Niagara Falls, made an appeal for Sunday closing. Mrs. Wallace contended that druggists deserve to enjoy the companionship of their wives and families at least one day in the week—a sentiment which later found indorsement in the speech of Charles Huhn. William E. Lee of Philadelphia thereupon remarked that he closed five hours from 1 to 6 on Sun-

days, and that many people had commended him for it. Moreover, he expressed a belief that the few who keep open in the city were not making a fortune by it. B. E. Pritchard of Pittsburg maintained that druggists don't want to close on Sundays. He remarked: "I venture to say a rising vote would not get a single affirmative." Dr. W. C. Anderson, who was then in the chair, hesitated to put the question to a vote because as he jokingly said: "I don't want to show you up."

While one can always advance a strong, eloquent argument for Sunday closing it does seem that right down in the bottom of their hearts the majority of druggists are against it. Those who do not oppose Sunday closing on principle, question it on other grounds. They doubt its feasibility. Mr. Pritchard argued, however, that a store well installed, with its trade firmly established, can be closed whenever the proprietor feels like it, and he cited cases to back up that assertion. He went on to say that the largest store in Pittsburg starts at 8, closes at 6, and is shut up on Sundays. Other druggists testified to observing shorter hours on Sundays to the benefit of their business.

C. P. Gladding of Hartford, Connecticut, explained how the public can be educated to understand shorter hours. His store is closed on Sundays from 1 to 6, and on holidays also. Mr. Gladding expressed the wish that the practice of Sunday closing were universal.

A resolution was finally adopted in which the Association recommended that all druggists should, so far as practicable, observe Sunday, or such portion thereof as is possible, as a period of rest.

* * *

**SILVER SERVICE
FOR
CHAS. F. MANN.**

In our report last month of the Niagara Falls meeting of the N. A. R. D. we dwelled at some length upon the voluntary retirement of Charles F. Mann from the chairmanship of the Executive Committee, and upon the very appreciative action of the membership in deciding to present a handsome gift to Mr. and Mrs. Mann. What might be called a presentation-speech-in-advance was admirably made at the convention by W. S. Elkin, Jr., but the gift itself could not be purchased during convention week with the limited facilities of Niagara Falls. A committee was therefore appointed to make the purchase in

New York subsequently, and we find from *N. A. R. D. Notes* that since then a silver service has been sent to and received by Mr. and Mrs. Mann.

In a letter contributed to *The Notes*, Mr. Mann feelingly expresses his appreciation, but it was thoroughly characteristic of the modesty of the man that at Niagara Falls he expressed the wish that he might have given up his place on the Executive Committee without any publicity. For eight or ten years Mr. Mann has spent himself with great devotion on the work of the N. A. R. D., as treasurer, as president, as chairman of the Executive Committee, and in other capacities as well, and few men know what sacrifices he has really made in behalf of the cause. Many a time he has burned the midnight oil when considerations of health, not to mention considerations of family, bade him take rest and recreation. He has worked faithfully and well, and it is exceedingly gratifying that the organization knows it and has so whole-heartedly given testimony of its appreciation. * * *

**THE CULTIVATION
OF
HYDRASTIS.**

An article appeared in this department last month in which the increasing scarcity of golden-seal was dwelled upon, and in which it was intimated that the domestic cultivation and growth of the drug was becoming exceedingly profitable. Since the article appeared we have received a number of letters from druggists who are seriously thinking of undertaking the cultivation of golden-seal, and who have asked us where they could secure reliable information on the subject. We have said to them personally, and we may now say publicly to others who may be equally interested, that the Bureau of Plant Industry of the Department of Agriculture, Washington, D. C., will furnish any inquirer with a booklet on the artificial cultivation of golden-seal. The government authorities are doing all they can to foster the domestic growing of this drug in view of the great scarcity of the native plant. On page 325 of the *BULLETIN* for August, 1905, an illustrated article on the cultivation of golden-seal was printed from the pen of Mr. Northam Warren. This paper will be read with pleasure by those who are interested in the subject, but inasmuch as it was written six years or more ago, later and more up-to-date information may be found in the government publications.

**TRADE CONDITIONS
IN CANADA.**

An interesting report on trade conditions in Canada was submitted by the Committee on Commercial Relations at the recent annual meeting of the Canadian Pharmaceutical Association, the chairman of which was R. S. Knowles of Vancouver. A series of questions had been asked of the members of the committee scattered over the Dominion, and from the answers it appeared that, for instance, business was better than a year ago on the average, although expenses had increased in as great a ratio as the profits, if not indeed in a greater degree. Salaries paid to clerks had gradually risen, and rents in some instances had advanced.

Cutting was reported as still being in existence, although the Atlantic and Pacific coasts were fairly free of it, as were Alberta, Saskatchewan, Quebec and the maritime provinces. Jobbing prices were said to have gradually risen, with practically no compensatory reductions. The chain store has grown in the Middle West a good deal, but it has helped those outside by making them lively boosters of Canadian goods and of their own preparations. Prescription prices have increased, and the committee was of the opinion that they could be increased still further if the C. Ph. A. price mark were used on all prescription copies. Finally, it was declared that no wholesalers were starting or backing cut-rate stores.

* * *

**WHY TAKE A
CHANCE?**

Several times during the last year we have pointed out how careless many druggists were in failing to secure adequate fire protection, and we have given specific instances where the owners of drug stores have suffered heavy losses from fire for this reason. Recently we find that there was a disastrous fire in a Southern town. Among others, three drug firms were entirely burned out. Were they fully protected by insurance? Alas, no! One of them had a stock of \$9000 and carried \$7500 of insurance. The second had a stock of \$7900 and carried insurance of \$4950. The third had a stock of \$3500 and carried insurance of \$2900. Doubtless all three are realizing now that they have had to pocket more or less substantial losses through sheer carelessness, but it is just a little late to wake up to this fact. Why take a chance?

**THE "INTERSTATE"
BOARDS.**

The Interstate Association of Boards of Pharmacy is one of the two or three branch or sectional bodies operating under the aegis of the National Association of Boards of Pharmacy. It covers the States of Ohio, Michigan, Indiana, Kentucky, Illinois, Minnesota and Wisconsin. The purpose of the body, as with the others of the same character, is to bring about uniform conditions and requirements for registration in the different States. The members of the Interstate Association recently met in Madison, Wisconsin, as the guests of the Wisconsin Board. Among other things they were taken through the grounds of the State University and were given a banquet. Burton Cassaday of the Indiana Board was elected president, Robin H. White of the Kentucky Board vice-president, and O. J. S. Boberg of the Wisconsin Board secretary.

* * *

THE CLERKS.

The organization of clerks known as the National Association of Pharmacologists is keeping up its activities. At a recent monthly meeting of the executive board it was reported with pleasure that three of the State boards of pharmacy now had clerks among their members. In other States the governors have given the N. A. P. the assurance that they will bear the request of the Association in mind in making future appointments. In the meantime the N. A. P. has adopted a resolution in which it is declared that many of the drug departments in State institutions are under the conduct of unregistered and incompetent help; that the State itself is thus violating its own laws; and that the governor of every State be called upon to correct the situation.

* * *

The Jacobs Pharmacy Company, of Atlanta, Ga., has purchased the three stores of T. H. Brannen, located in that city, for a consideration reported to be between \$50,000 and \$60,000. This move gives the Jacobs Company ten stores. Verily, the chain-store movement seems to be growing!

* * *

Geo. H. Hitchcock, Ph.G., president of the New York branch of the A.Ph.A., and a well-known pharmacist of that city, died suddenly last month of heart failure.

EDITORIAL

PHARMACISTS AND "606."

Some months ago, when we were able to secure from H. A. B. Dunning a couple of exceedingly valuable contributions* detailing with some care the best methods of dispensing solutions of Salvarsan, otherwise known as "606," we expressed ourselves editorially as believing that this remarkable chemical would doubtless be followed by others of a somewhat similar nature, and that pharmacists would thus be provided with an opportunity to exhibit their scientific skill and to take advantage of their scientific training.

It cannot be said that any great number of pharmacists have seized upon the opportunity to make capital of the situation among the physicians in their neighborhood. And yet considerable interest has been exhibited in the subject. Thus we have found that several papers have been contributed during the past summer to the State pharmaceutical associations. We recall one, for instance, which was read before the New Jersey Pharmaceutical Association by George M. Beringer, Jr., while another was presented to the Missouri Association by W. K. Ilhardt.

Following the reading of Mr. Ilhardt's paper there was an interesting discussion which is fully reported in the volume of proceedings. It was made apparent, as we have already declared, that the preparation of Salvarsan solutions calls for a good deal more pharmaceutical and chemical skill than the physician can ordinarily exhibit, and that the pharmacist can make a ten-strike if he goes after the business in earnest. Mr. Ilhardt declared that some of the physicians in his acquaintance at first tried to prepare Salvarsan solutions themselves, thinking that the work was easy, and not liking to pay the pharmacist for his trouble. The results, however, were not favorable. One doctor, for instance, got his solutions too alkaline and his patients were most unfavorably affected.

Mr. Ilhardt said that he had made the solution for physicians about forty times. The

medical men were delighted with his cooperation, and in some instances had gone so far as to mention him in articles on Salvarsan contributed to the medical press. In reply to an inquiry made by Professor Hemm, Mr. Ilhardt explained that he had started out by charging \$10 for the preparation of these solutions. After learning the time involved, the nature of the difficulties, and the equipment needed, he had raised his price. He had found this particularly necessary because considerable experimentation was required at the outset. The work was one of great importance, the lives of men were at stake, and the utmost care and precaution had to be exercised. Some physicians had complained about the price, while others, especially those who had tried to do the work themselves, thought the figure very reasonable. Mr. Ilhardt is now charging from twelve to fifteen dollars for making the solution, and in one case he sent out a bill for \$25. While on this question of price it may be said that A. H. Koch declared that he usually charged \$10 where the patient paid for the Salvarsan, making the total bill \$13.50.

Incidentally one or two interesting points concerning the product were brought out during the discussion. Mr. Ilhardt dwelled on the necessity of so filtering the alkaline solution that it may be perfectly clear. Leo Suppan asserted that the filtration must be carried on as rapidly as possible, and for that reason he thought cotton was generally superior to paper. He asked Mr. Ilhardt whether he had ever tried any of the hardened filtration papers which could be gotten in various thicknesses. Mr. Ilhardt replied that he had not—he had tried papers of various grades, but had been unable to remove the specks and fibers with the paper employed. Upon this point Mr. Koch explained that he used rapid filtration paper. He filters the solution, and when it comes from the filter he has never had occasion to run it through a second time.

Something having been said about the untoward results following the administration of Salvarsan, D. V. Whitney gave it as his understanding of the subject that the drug should never be employed when the spirilla of syphilis were absent. The first and primary thing to be considered, he asserted, was the presence or absence of spirilla. He spoke of one case where the patient himself was convinced that he was the victim of syphilis, and where ulcers

*Mr. Dunning's articles appeared on page 14 of the BULLETIN for January, 1911, and page 79 of the issue for February, 1911.

had formed. The attending physician, however, failed to find the spirilla, nor did he go farther and employ the Wassermann test to determine the actual presence or absence of the disease. He injected the Salvarsan solution, with very bad results.

Reverting now to the question of filtration, we may say that we have interviewed Leonard A. Seltzer of this city, who has been making a specialty of dispensing Salvarsan solutions. Mr. Seltzer tells us that in filtering the alkaline solution he uses a filter paper which has been sterilized by live steam. He prefers this to cotton. It is understood that this whole question of filtration refers to the alkaline solution. The neutral suspension is of course not filtered.

As to price, we find that a considerable disparity exists. One of the Detroit pharmacists has been charging the physician \$5, but when the doctor sends the patient direct to the store a price of \$10 is made. We understand, although we may be wrong about it, that some of the eastern pharmacists are getting only \$5, and we have been told that one man is even charging as little as \$3.50. This is unfortunate. If a pharmacist doesn't respect himself and his skill, he can scarcely expect any one else to respect him.

A BOOK OF ANSWERS TO BOARD-OF-PHARMACY QUESTIONS.

E. G. Swift, publisher of the BULLETIN OF PHARMACY, has just brought out a book entitled "Board Questions Answered." The department conducted under this title in the BULLETIN for a number of years will be recalled by readers of this journal. Thousands of students and even pharmacists read the department every month with keen zest and interest, and they doubtless will be glad to know that a book on the subject has now been published and handsomely bound in cloth.*

Complete sets of examination papers used by different boards of pharmacy are given, and "answers are compiled for the benefit of graduates of the pharmacy colleges and unregistered men generally who desire to review their knowledge preparatory to taking the board examination." The work of compilation was done by John Helfman, A.B., B.S.Pharm., who was graduated from the four-year course in pharmacy of the University of Michigan,

who spent five years altogether in the University, and who has now for several years been the assistant editor of the BULLETIN. An introduction to the volume is contributed by Harry B. Mason, editor of a series of practical books of which this is the third.

It is made clear in the introduction to the volume that the book is not intended to provide a crammer's course in pharmacy. Those who are "seeking a pharmaceutical education on the quick-lunch plan" are likely to be disappointed. On the contrary, the book is designed for the use of graduates in pharmacy or home students who desire to refresh their memories in preparation for the board ordeal. And there is no doubt that every candidate needs a review course of some sort. Even the recent graduate is likely to be "plucked" when he takes the board examination. In Pennsylvania, for instance, no man can be examined for full registration as a proprietor unless he is a college graduate, and yet we find a large percentage of failures. Why is this? Is it because the colleges have failed to do their duty and the boards have found them out?

We do not think so. In the great majority of cases the reason is much more likely to be this, that on the one hand the boys are not familiar with the particular kind of questions asked by the board, while on the other they have forgotten a lot of detailed facts which they understood perfectly well when originally studied, but which have slipped their halters and escaped the memory. The simple fact is that every candidate, no matter how thorough his education may have been, finds it necessary to make specific preparation for the board examination. So well is this generally realized that in at least one of the leading university schools of pharmacy—a school having high ideals of scholarship—a special course is given in pharmacy-board questions and answers at the end of the last year's curriculum.

The present book is evidently intended to provide some such course. It will enable the home student or the college graduate to refresh his memory on the one hand, and on the other it will make him familiar with the character of questions asked by the boards of pharmacy in the different States.

Every one of the several examination papers is complete. The questions are not selected—the easy ones given and the hard ones omitted. Not even catch questions have been dodged. Every one of the examination papers is repro-

*The price is \$1.50, and the publisher is E. G. Swift, P. O. Box 484, Detroit, Mich.

duced exactly as it was originally used by the board in order that the student may get an adequate and thorough idea of just what is comprised in the examination papers of that particular board.

THE N. A. R. D. WANTS A PRICE-PROTECTIVE PLAN THAT WILL DO THE BUSINESS.

The N. A. R. D. is on the hunt for a valid and effective price-protective plan. Price protection seemed to be the chief issue at the recent convention in Niagara Falls. After the discussion of several plans it was finally voted to put the whole thing up to the Executive Committee, and to charge that committee with the duty of framing a valid plan and of seeking its general adoption. The Chicago delegation came to Niagara Falls heartily in favor of a new form of the old coupon plan suggested by one of its members, John J. Boehm, and succeeded in having it referred to the Executive Committee with power to act. The Executive Committee, under the chairmanship of Charles H. Huhn, is now showing a determination to follow out the instructions of the convention. In order to go at the proposition with all the wisdom available, it cordially invites the suggestions of every student of the problem. At its meeting to be held during December in Chicago, the committee will doubtless make either preliminary or final plans for the adoption of some definite method of price protection.

In the meantime we have asked Frank H. Freericks to contribute an article on the subject to our pages. His analysis of the situation will be found elsewhere in the present issue, and will prove to be full of interest and suggestion. Mr. Freericks has the great advantage of blending pharmaceutical sympathies and experience on the one hand, with a legal training on the other, and what we particularly requested of him was that he give his opinion of the probable legality of the various price-protection plans now under discussion, and the relation they bear to the recent decisions of the United States Supreme Court. It will be gathered from his contribution that while he deems the present Miles-Freeman plan to be legally sound, he questions the validity of the coupon plan. If manufacturers and jobbers, however, "shy" at the Miles-Freeman plan because of the practical difficulties of

carrying it out, he suggests that it be combined with the coupon plan in such manner as to secure the advantages of both methods. In this way he thinks the legality of the "agency assignment" scheme will be retained, while the practical simplicity of the coupon plan will do away with a good deal of bookkeeping and inconvenience of one kind and another.

Mr. Freericks's suggestion is certainly worth thinking about. Inasmuch as Judge Errant, the official attorney of the N. A. R. D., though fortunately improving in health, will not be back in harness for some time, it seems wise that other legal talent in the drug trade should be applied to this problem before a solution is finally attempted. Men like James H. Beal and Frank H. Freericks will be exceedingly useful in the emergency, for the N. A. R. D. is facing a legal even more than a commercial situation, and the opinions of laymen are of very little value.

PRIMARILY ABOUT SHOW-CARDS.

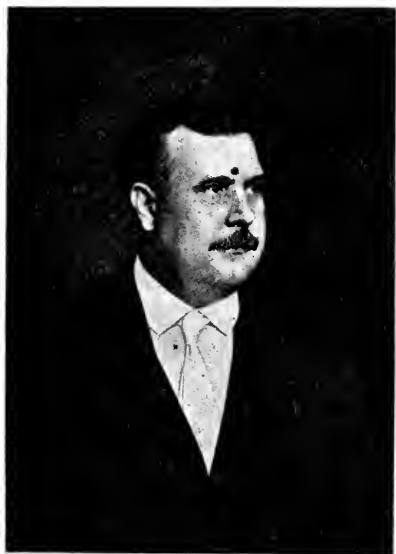
Readers of the BULLETIN OF PHARMACY, thank heaven, have the true coöperative spirit! If one of them desires suggestions or help of any kind, others are not wanting to render their assistance in brotherly fashion. Two or three months ago a subscriber complained that we had had very little in the BULLETIN on the subject of show-cards. We at once printed his complaint and asked our readers what they had to offer for the benefit of the BULLETIN brotherhood. The result is partially seen in the present issue of the journal. In the "Illustrated Section" is a full-page engraving showing a number of cards gotten up by A. R. Eberle of Watertown, Wis. Among the "Contributed Articles" is a paper by Edwin P. Creutz of Wausa, Neb., accompanied by a couple of illustrations. In the department of "Business Hints" are a number of legends for show-cards furnished by G. R. Thomason of Stockton, Kansas. These three contributions will do as starters. We have received several others to which we are not able to give space this month, but which will appear from time to time in the BULLETIN. Meanwhile we shall be glad to hear from other readers who have had practical experience along this line and who have either specimens or ideas to contribute.

Let us help one another!

THE HALL OF FAME

THEODORE F. MEYER ELECTED PRESIDENT OF THE JOBBERS.

The new president of the National Wholesale Druggists' Association, elected to that office at the meeting in New York last month, is one of the most interesting personalities of



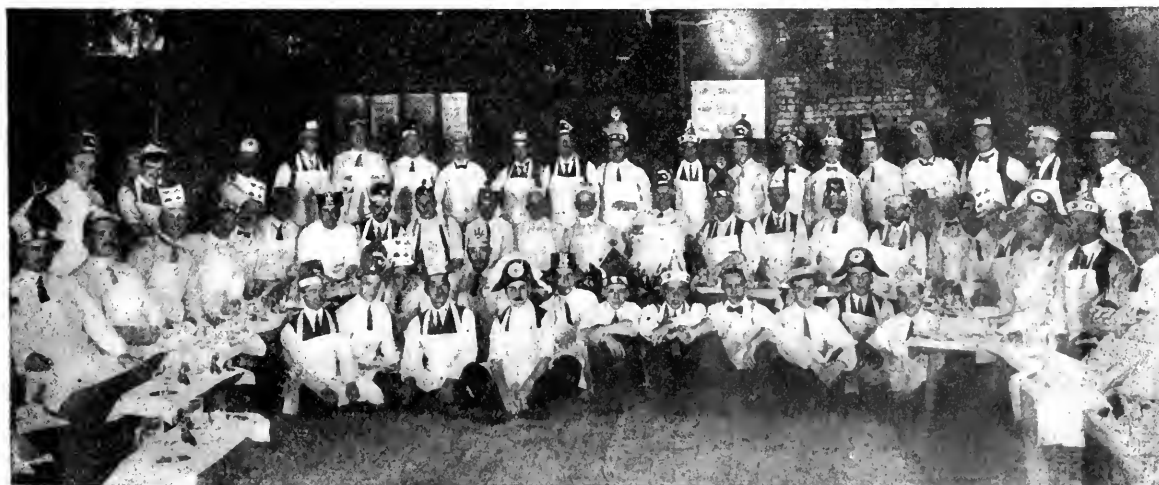
THEODORE F. MEYER.

the country. On the one hand a royal entertainer, unstinted in his generosity toward friends, and of great charm and warmth of manner, he is on the other hand a man of hungry ambition and remarkable aggressiveness. To his business associates he has

often remarked that "the world is the market for Meyer Brothers." This house is said to have the largest business of any jobbing house in the United States—and consequently in the world. The number of employees has been asserted to be considerably in excess of 700, and the annual volume of business is generally supposed to be in the neighborhood of \$8,000,000. A trip through this great St. Louis establishment shows the marvelous variety of the modern jobber's business, and indicates that the wholesaler, like the retailer, has found it necessary to add side-line after side-line if he would succeed at the game. Two or three decades ago Mr. Meyer's father served a term as president of the N. W. D. A., and now that the son is called to the same position it would seem that the Meyer dynasty promises to achieve a permanent place in the annals of the drug trade of the country.

MR. CARRAGAN'S ANNIVERSARY DINNER.

One of the most lovable and popular men that the drug trade of this country has ever produced is Sydney H. Carragan, Assistant Manager of the New York branch of Parke, Davis & Co. It would be an exaggeration to claim that "Syd" has been with P., D. & Co. since before the flood. All he owns up to is twenty-five years. His silver anniversary he celebrated in fitting style on September 25 by giving to fifty-eight of his associates a unique beefsteak dinner at Reisenweber's. It was a gale of fun from start to finish. The "boys" in the house and some of those on the



A flash-light picture of the Carragan diners.

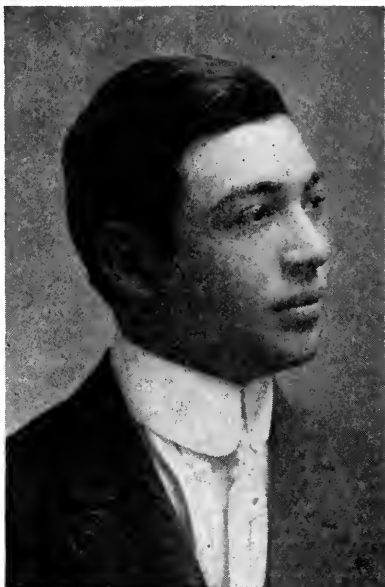
road presented the host with a magnificent watch. The visiting *confrères* gave a chain, a gold pencil, and an umbrella. The guests vied with one another in doing honor to the host and in expressing the warm affection cherished by a multitude of friends for Syd Carragan.

A flash-light picture of the diners is shown on page 449. The fantastic paper caps, the large butcher aprons, and the beer-keg stools were the fanciful paraphernalia of the strange feast. The beefsteak was served on squares of bread. The chops were removed from the huge platters with the aid of Nature's forks. Plates and knives were scornfully rejected.

The young, rich voices of Parke, Davis & Co.'s New York quartette provided excellent music. Mr. Lester Carragan played the accompaniments. In addition, three young "gentlemen of color" made things very lively with their singing versions of Alexander's ragtime band and other popular airs.

DAVID IRVING COHEN OF JERSEY CITY.

David Irving Cohen, Ph.G., is a young druggist who has been very successful as president of the Young Men's Hebrew Association of



DAVID I. COHEN.

Jersey City, a body of 200 members. In this capacity he has put his business ability to good use. When he accepted the presidency, the organization was very much in debt. But he

has since lifted it out of the mire into a position of good standing. Born in New York in 1888, Mr. Cohen was graduated from the public schools of that city, attended high school, later the College of the City of New York, and finally took a degree from the College of Pharmacy of Columbia University. For a considerable time he managed the Gold Pharmacy, one of the largest drug stores in Jersey City. At present he is prescription manager of one of the big Hegeman stores in New York.

THE PRESIDENT OF THE OHIO ASSOCIATION.

In making Azor Thurston, of Grand Rapids, its president this year, the Ohio State Pharmaceutical Association selected a man



AZOR THURSTON.

who is of much credit to his calling. A graduate of the School of Pharmacy of the University of Michigan, he has always been true to the scientific and professional precepts of the late Dr. Prescott, and he has made analytical and allied work pay him handsomely. Moreover, he has for several years been State Chemist under the Dairy and Food Commission, and during all this time he has of course continued his drug business. Mr. Thurston is quite as successful in commercial as in sci-

entific directions, however, and is the largest stockholder and the cashier of the Grand Rapids Banking Company, as well as the secretary of the Crescent Telephone Co. and a director in the Toledo Life Insurance Co.

A PITTSBURG DRUGGIST.

In the BULLETIN for April of this year we had an excellent symposium comprising a number of papers from practical druggists on the subject of window dressing. One of the contributions was by A. Armor of Pittsburg, and we may say that during the last few years a number of practical suggestions of this char-



ALPHEUS ARMOR.

acter have come to us from the same source. We now have pleasure in presenting a portrait of Mr. Armor himself in order that our readers may form his acquaintance.

HE SEEMS TO BE IN DEMAND.

Druggists who attend the annual meetings of the N. A. R. D. know about W. E. Bingham of Tuscaloosa, Ala. He is always on hand as a representative of his State, and quite frequently he has served as one of the two assistant secretaries appointed every year at the N. A. R. D. conventions. At home Mr.

Bingham is a member of the State Board of Pharmacy, and he seems to have a life cinch on the secretaryship of the State Pharmaceu-

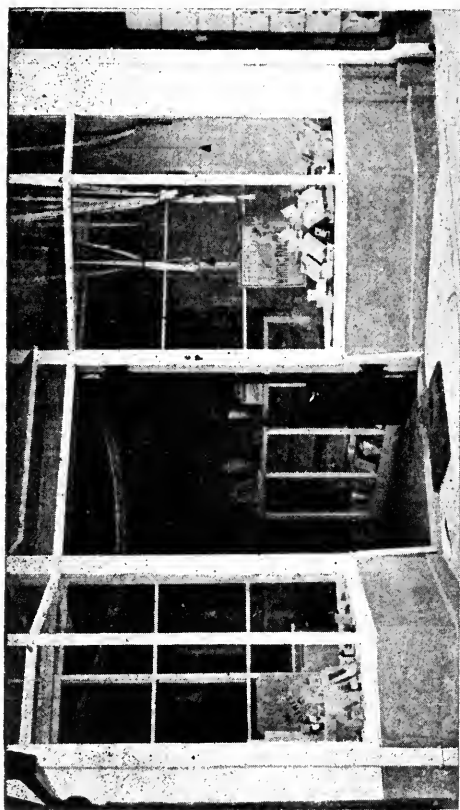


W. E. BINGHAM.

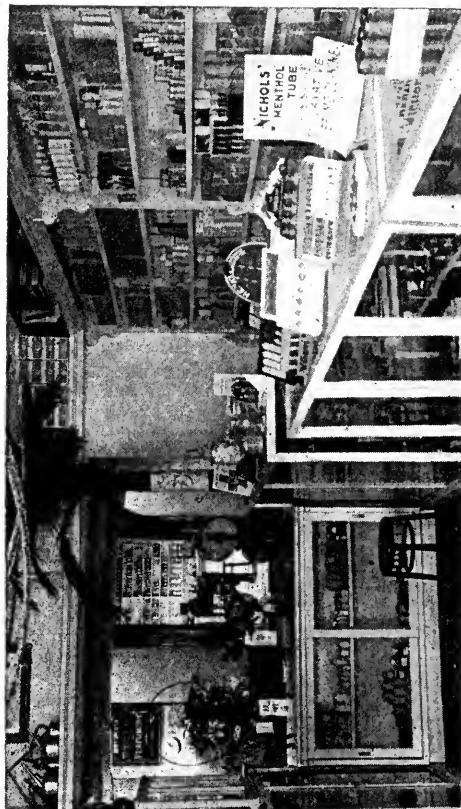
tical Association. Not only this, but Mr. Bingham has been more or less active in local politics, and he is now serving as president of the City Council. More than that, we find that he is Grand High Priest of the Grand Chapter of Royal Arch Masons of the State of Alabama—an honor that any man might covet. Is Mr. Bingham appreciated? The question seems to answer itself pretty eloquently.

Indifferent Affinities.—

Prof. R. Pictet, who likes to experiment at extreme temperatures, says that sulphuric acid and caustic soda will not unite at temperatures below -85° C. Sulphuric acid and 23-per-cent ammonia commenced to react at about -68° C., and the temperature suddenly rose to above $+100^{\circ}$ C. Marble dust began to react slowly with sulphuric acid at -52° C., and was very active at -15° C. Dilute sulphuric acid refused to pay any attention to barium chloride at temperatures below -70° C., and 33-per-cent hydrochloric acid absolutely ignored silver nitrate below -109° C. Blue litmus remained blue in the presence of sulphuric acid at -140° C., and only blushed at -105° C. It behaved the same way with strong hydrochloric acid. Solutions of caustic soda and phenolphthalein, in absolute alcohol, remained colorless below -100° C. when mixed. Sodium refused to dissolve in 84-per-cent alcohol below -48° C., and potassium was indifferent below -68° C. But when they began to unite they warmed to it rapidly.



This American store in Tokio, Japan, was so unique for that city and country that the newspapers gave it a half-column notice on the front pages when it was opened a few months ago. It is called "The Hospital Pharmacy."



It will be seen from this view of the interior that the store is modeled after our American establishments, and this was the feature of it which was noticed in the newspaper articles. The store is even provided with an American soda fountain!



Here we have Manager Jasper A. Fenner and his chief assistant, Mr. Muri, at work in the prescription room. Mr. Fenner is an alumnus of the School of Pharmacy of the University of Michigan, class of 1906.



Mr. Fenner has succeeded in working up a considerable export trade among the physicians of Manchuria, China, Siam, and the Philippine Islands, supplying them with surgical instruments and hospital supplies.

An American Pharmacy in Japan.



The complexion beautifier she mentioned is here.
It's EBERLE'S
FACE POWDER
Price **35¢** a box.

We can furnish the spices for that
THANKSGIVING TURKEY.

There are no game laws for those who hunt with a
KODAK
Price **\$2. to \$100.**

Don't hope to find a better drug store than ours.
There isn't one.

For that tired feeling take
EBERLE'S ALTERNATIVE EXTRACT.
It purifies the blood.
Price **\$1.00** a bottle.

Five coppers will buy

a "BEN ALI CIGAR."

Some Home-made Show-cards.

A. R. Eberle, Watertown, Wis., sends us these six placards, and remarks: "There is nothing unusual about these cards, but they will perhaps illustrate what can be done by any one with a little practice and with an ordinary sign-maker and a ruling pen. The illustrations on the cards were cut from posters and discarded magazines. We suspend these signs around the store, and find them to be good silent salesmen of an effective sort." Mr. Eberle's cards are 14 by 22 inches in size. The cardboard is white, the ink black, and the borders red. In an article contributed to page 376 of the BULLETIN OF PHARMACY for September, 1909, Mr. Eberle described in detail his method of making show-cards.

WANTED: A VALID PRICE-PROTECTION PLAN.

What Will Stand the Test Now that the Supreme Court has Spoken?—A Consideration of the Freeman, the Miles, and the Coupon Plans—A Final Suggestion—The N. A. R. D. to Adopt Something in the Near Future.

By FRANK H. FREERICKS.

In the drug trade price protection is without doubt as important and as needful to-day as it was in 1898 when its necessity brought into life the National Association of Retail Drug-gists. The insistent demand for it at the recent Niagara Falls convention of the N. A. R. D. emphasized this to be the truth, and the response given to this demand by the officers and the executive committee fully proves that they are driven to the situation and mean to do their best.

In 1898 and for years thereafter, price protection meant that a plan should be evolved which would be both practical and effective. To-day price protection means all that and more, for we know now that it must not only be practical and effective, but it must also be legal. The all-important present-day need of the retail drug trade is an effective, practical and *legal* plan of price protection. The last convention of the N. A. R. D. imposed upon its executive committee the duty of finding such a plan and of seeking its adoption. Truly no small task, and yet let us hope not an impossible one.

In responding to a request from the Editor of the BULLETIN OF PHARMACY for a discussion of this problem, the writer's mind turns first to the legal limitations which concern it. To understand and apply these limitations of the law is undoubtedly of first importance. The question is, under the law, what can and what cannot be done? To decide this we have not far to look, for the Supreme Court of the United States, in its late decisions in the Standard Oil and Tobacco Trust cases, and in the case of the Dr. Miles Medical Company vs. Parks & Sons Co., has spoken in no uncertain terms, and has laid the law down right at our doors.

THE SUPREME COURT DECISIONS.

Without entering at this time into a detailed analysis of the Supreme Court decisions in the above cases, we accept as settled:

1st. That no effective and enforceable plan of price schedules is legal.

2d. That no contract plan, restricting prices under which the manufacturer *sells* his goods to the trade, is legal.

3d. That a contract plan, restricting prices, under which the manufacturer effectively retains the ownership in his goods until they reach the consumer, is legal. This last proposition involves a true agency agreement, under which both jobber and retailer are in a true sense agents; they do not own the goods of the manufacturer, but they hold them on consignment, and they thus act strictly in the capacity of agents for the manufacturer in placing his goods into the hands of the consumer.

In support of the last proposition it may not be amiss to say that it has been established in the law since the early days. The maxim, "*Qui facit per alium, facit per se*," is as old as the English Law itself; and since it cannot be questioned that a manufacturer can sell his goods at such prices as please him, and since by acting through another he merely acts for himself, he thus himself places his goods in the hands of the consumer, and himself charges the price to the consumer when he does this through a properly constituted agent. The Supreme Court in its majority opinion plainly draws the distinction, and by inference upholds the law of agency, as here defined, by constantly and repeatedly pointing out that under its form of contract, which was then before the Court, the Dr. Miles Company did not merely attempt to control the price at which its agents might sell its products, but made the same attempt where dealers had been actually purchasers of its products and owned them outright. In the minority opinion Mr. Justice Holmes, in so many words, stated that "if the contract involved purely an agency agreement, no one could question its validity."

THE FREEMAN-MILES PLAN.

In the light of the law as lately defined by

the Supreme Court of the United States the present-day method of operation by the Freeman Perfume Company and the Dr. Miles Medical Company seems entirely legal. The plan provides that both jobbers and retailers are in a strict sense acting as agents only; that the goods placed in their hands remain the property of the manufacturer; that in selling the goods to the consumer they are acting for the manufacturer—and thus it is the manufacturer himself who sells the goods to the consumer. In theory there is not a flaw in this plan; in practice it may be that other manufacturers have not adopted it because the courts have not yet decided whether the agreements are in a true and legal sense “agency agreements.” This may be an obstacle which nothing will remove except a decision rendered by the courts on the very point.

On the other hand, however, it is claimed that the Freeman and Miles plan is not feasible because it involves too great an expense with too much detail. This objection seems principally to come from the wholesale druggist, and if this objection is valid, then, notwithstanding the legality of the plan, its general adoption will be greatly hindered.

THE COUPON PLAN.

To meet this objection of impracticability raised by both manufacturers and jobbers, there has lately been brought forward the oft-agitated and discussed “coupon plan.” The new advocates of the coupon plan are more enthusiastic than ever. They are of the opinion that it does not present nearly the obstacles which in practical operation are charged against the present Freeman and Miles plan, and they seem assured of its legality.

The agitation for the adoption of the contract plan at this time is of very great, yes, vital importance, because of the instructions given to the N. A. R. D. Executive Committee at Niagara Falls. I am not prepared to say that the practical difficulties under the coupon plan are less than those presented by the present Freeman and Miles plan, but at this time it would appear that the possible legal features of this plan should first be carefully considered. It is stated with confidence that the question of legality cannot enter into a consideration of the coupon plan as lately proposed. It is pointed out that there is no agreement of any sort, and that if the manufacturer sees fit to

reward the coupon holder for the face value of the coupons, when he has sold the goods at the full price, it can concern no one but the manufacturer himself. The latter is merely presenting the dealer with a gift with which the law cannot interfere.

IS THE COUPON PLAN LEGAL?

The writer is not satisfied, however, that the coupon plan involves no contract. It is hardly necessary to point out that a contract, in order to be such, need not be in writing. It is equally unnecessary to point out that to offer and give a reward for the performance of a certain act, is, on the completion of such a performance, to make and complete a contract. It is my humble judgment that if any manufacturer sells his goods to 46,000 retail druggists, and offers to each of said 46,000 druggists a reward for selling such goods at the price stipulated by him, then when such 46,000 retail druggists have sold at the price stipulated, and have earned and received the reward which he offered, there have been just 46,000 contracts fully executed and completed.

In the light of the Supreme Court decision in the Dr. Miles case, are these 46,000 contracts legal? Naturally the answer depends upon what the contract really means. It is proposed that Smith, the manufacturer, shall through Brown, the jobber, sell to Jones a bottle of proprietary medicine, which is to be sold by Jones to the consumer for \$1.00, and for which Jones is to pay \$1.00. There goes with this bottle of proprietary medicine a condition or promise, which is attached to it in the shape of a coupon, and which is to entitle Jones to 33 cents, provided Jones sells that bottle to the consumer for \$1.00. This condition or promise to pay 33 cents cannot be separated from the transaction under which this bottle of proprietary medicine has been sold to Jones. It is as much a part of the contract of sale as is the medicine in the bottle.

When Jones buys this bottle of proprietary medicine, with the expectation of earning the reward, which is evidenced by his subsequent cashing of the coupon, then it may be claimed with much reason that Jones has bought this bottle of proprietary medicine and has entered into a contract under which its price was restricted. If these premises are correct, then under the proposed coupon plan there would

be 46,000, or nearly all the retail druggists of the country, who would enter into the same kind of a contract restricting prices. Whether this be legal can best be judged from the following extract of the opinion in the Miles Medical Company case:

"If there be an advantage to a manufacturer in the maintenance of fixed retail prices, the question remains whether it is one which he is entitled to secure by agreements restricting the freedom of trade on the part of the *dealers who own what they sell*. As to this, the complainant can fare no better with its *plan of identical contract*, than could the dealers themselves, if they formed a combination, and endeavored to establish the same restrictions, and thus to achieve the same results by agreement with each other."

Of course this question of the legality of the coupon plan is based on opinion only, for as yet no court has passed on it. It may even be claimed that since the manufacturer will not need to depend upon its success by enforcing it against any one, there will be no occasion to draw its legality into question. This might be true, if it were not for the fact that the dealer who buys the goods and sells them at less than the stipulated price, and who thus cannot realize on his coupons, will not be satisfied with such a proceeding, and, being directly concerned, if the plan involves an illegal feature he need only come into court and ask that the manufacturer be restrained from operating under the plan. Again I say that I have my doubts of the legality of such a plan.

where the goods *are sold* by the manufacturer to the wholesale and retail dealer.

WHAT CAN BE DONE.

The writer may be wrong in his opinion that the proposed coupon plan presents legal difficulties, but, if he be right, then in making an effort toward securing the necessary price protection we are confined to the agency agreement. The thought and study of the drug trade should therefore be devoted to removing the objectionable features from the agency plan, or to securing such a change in the law as will permit the small dealer to protect himself. If manufacturers are not adopting the Freeman and Miles plan, because the courts have not yet passed on it, the only thing to do is for the interested parties to take such steps as will bring about a decision of the court. If practical difficulties keep other manufacturers from taking up the plan, then the necessary thing to do is to look into these practical difficulties and seek a remedy. It would seem that these practical difficulties have been exaggerated, but if they really exist to any great extent, and if they do not exist to nearly the same degree under the proposed coupon plan, then I would suggest as a solution that the agency agreement plan be combined with the coupon plan, and thus, as a part of the agency agreement, the coupon plan could be made equally legal. Since each coupon would speak for itself, bearing a serial number, there would be no need for keeping records on the part of the jobber, and thus the much complained of detail would be done away with.

MAKING EFFECTIVE WINDOW DISPLAYS.

Their Arrangement and Care—Qualities that Make a Trim Attractive—The Effect of Unity, Color, and Motion in an Exhibit.

By H. M. CURRY,*
Ellsworth, Kansas.

Some wise comrade has said that "our windows are the index of our own business." That is a fact that too few people realize. Your windows are as surely an indication of what is inside, as your clothes are an index of your character.

Clean, well-dressed windows give you at

*Portions of a paper read before the Kansas Pharmaceutical Association.

once a place in the eyes of a discriminating public, as unmistakably as smart clothes or elegant store fixtures. Aside from this, the most important part of one's business, the profit side, cries loudly in favor of well-kept, daintily arranged, and business-bringing display.

DETAILS OF A GOOD WINDOW.

In the arrangement of a store, the display windows should have careful consideration. If

they are not modern in design, they should be made so. A good window should not be too high above the sidewalk, nor should the other extreme be tolerated. Twenty-four to thirty inches is a good height.

The woodwork or frame should be as light as sufficient strength will permit, and free from all wood trimmings that will harbor dirt—the plainer the better. Good natural wood finish for the inside is best.

The floor should be good, preferably polished or waxed, that it may be easily cleaned and kept so.

The next requisites are a few sensible pieces of window furniture, most of which may be home-made and of great service. When room will permit, it is wise to maintain a small space where window-trimming material may be kept. This does away with much vexation and saves both time and money.

Nearly all trims are simply variations of geometric forms which can be made up of units that are interchangeable, and when once accumulated will serve for all time. This subject I will take up later in a series of demonstrations that have proved very useful. Nearly all window trimmers coincide in the main essentials of successful window trimming and display.

THE CARE OF THE WINDOW.

Windows should first of all be absolutely clean, and, by the way, a boy that can wash a window *clean* is one worth encouraging. If he gets into the corners, keep him. He's an exception and probably a jewel.

The next idea is a weekly change. Except on rare occasions, a display should never remain in a window longer than a week.

Fridays seems to me to be the day for window dressing. In nearly all towns, Saturday is a busy day. More people are in town than on any other day and a clean new display appeals to country people as much as any other one thing.

Then, too, most towns have only weekly editions of newspapers. If your windows are in accord with your advertising, they clinch the argument and help the advertisements to be truthful.

UNITY DESIRABLE.

There is little opposition to the idea that a window, to be successful, should feature but one line at a time. This may be accomplished

in either one of two or three ways. Small quantities of goods, in a setting of well-arranged show-cards, with a harmonious color-scheme, is one. Large quantities of any one thing in rows or uniform designs, oft repeated, and systematically arranged, impress those who see the window with the idea that the goods are right, that the quantity and quality are both desirable and adequate, and that the store displaying the line is doing a good business in that particular article, making it necessary to buy largely.

A single article of merchandise, neatly displayed, often draws attention through sheer audacity. It's like a sharp "bang" as against a rumble of continuous noise which only annoys but does not interest.

MOVING DISPLAYS.

Motion displays are always good, and may be arranged with simple mechanical means. In towns where there is either electric current or water-power the matter is easily solved. One can secure small moving mechanisms at reasonable prices that would soon pay for themselves.

I recently read of a man who built a long tank in his window in which he had placed seven mud turtles, on the backs of which he had painted the letters spelling his name. He offered a reward of \$25 to any one who would catch them so placed that the letters would spell his name correctly.

THE EFFECT OF COLOR.

Attractiveness may be obtained through artistic arrangement or massing of goods and by color schemes that act as foils for the goods.

Any strong color used exclusively and in quantity is bound to attract attention. It will be seen from a distance and, if striking enough, will often induce people to cross the street in order to satisfy the curiosity which it creates. The dainty arrangement of soft tints, in good harmony one with the other, is in better taste for all displays of toilet articles, perfumes, and stationery displays.

Much assistance can be secured from manufacturers of good lines of either of these articles if they be courteously solicited and are assured that their aid will be mutually advantageous.

Fancy backgrounds are excellent adjuncts for some displays, but should be used cautiously and knowingly. Nothing could be more

out of keeping than a poorly selected background that has no relation to the display.

Some of the artistic modern wall coverings offer splendid opportunities, however. With a little care they may be made into beautiful panels and backgrounds that add greatly to the effect of the show-window display.

The subject of lighting the window is of material importance. It is generally conceded that the best light is one which is at the top of the window, so concealed that it cannot be seen from the street, and sheds light down upon the floor and into the window.

THE VALUE OF NIGHT DISPLAYS.

The value of night display is much underrated by many merchants. The best hours of the day are after dark. People who are on the streets at night have more time to inspect displays, are usually more inclined to notice them. A window attractively lighted has much the advantage of a daylight display for the simple reason that the lights are intense and concentrated on the display. Naturally people are led to look at it.

The subject of lighting should not end with the window, as a nice, well-lighted store is always attractive, and in an increased ratio a poorly lighted one is repellant.

Do not let the work of decorating the window be every one's work. Everybody's business is nobody's business. Select the man who loves the work, then give him every encouragement in your power. If he does a good job, let him know you appreciate it. Don't pinch him on expenses. You'll get it all back. Let him out occasionally, that he may see what the other fellows are doing. It is good generalship to know what the enemy is up to. Make him realize the importance of his work, the necessity of doing it well, and that you are depending upon him to keep up the reputation of the store in that respect. You will be repaid a hundredfold. You will have made a partner of him, unconsciously, and a loyal employee is certainly a valuable asset.

In window display, timeliness is an important factor. The goods shown should always be those which are being used at the moment. It is folly to throw opportunity away in displays which have no connection with current needs or present desires.

In this connection I would call your attention to a "Calendar of Window Displays," which has been published frequently in the drug journals as being worthy of preservation. It need not be adopted absolutely, but should be studied and adapted to individual needs. If used as a basis for thought along this line, it will be found extremely helpful.

There are some instances where there is good excuse for lending your windows to the exploitation of the merits of patent medicines, but generally considered, I believe that every thinking man in the drug business can use his windows fifty-two weeks in the year to better advantage blowing his own horn. The greater number of these hand-me-down window displays are nine-tenths manufacturers' and the balance for you. "Jones pays the freight."

THE FRUITS OF GOOD DISPLAYS.

In conclusion let me urge the importance of window display as a part of your advertising scheme. None of us can gainsay the fact that advertising pays, and pays big. Think of five or six largest concerns in the business world you know of and why you know them.

They advertise largely and all the time.

Marshall Field & Co. spend \$50,000 annually for window displays alone. John Wanamaker's first day's business brought him \$24.67. He kept the 67 cents for change and spent the \$24 for advertising, and he kept that system up. Did it pay?

It is useless to spend either time or money in advertising inferior goods. Be sure of your quality, ask an honest price, and there is no reason for being afraid to tell the people about it.

Tell them in the newspapers, and along with that medium of publicity "show 'em"—in a window that is clean, neatly trimmed, and bearing a message of desirable merchandise for sale.

It is equivalent to the cheery smile that greets you as you enter a store where all is bright and orderly. It is as truly a sign of cordial welcome as is a hearty handshake.

It never wears a frown, nor does it ever keep a customer waiting. It is working all the time for and never against you. It never complains of working overtime, but will show evidence of neglect. It is the soul of your business. Keep it sweet.

SHOW-CARD WRITING.

Practice Makes Perfect—Some Specimens Showing what Can Be Accomplished by One Who Tries—Materials Used in the Work.

By **EDWIN P. CREUTZ,**
Wausau, Nebraska.

With sufficient practice any one can become a first-class card-writer. A person does not necessarily have to be a genius to be able to produce artistic show cards. Making letters is more mechanical than artistic. The chief require-

handle. The round ferruled brush gives better satisfaction than does the flat. You will also need a good yardstick with a straight edge and a No. 3 or 4 pencil. With these tools you will be able to duplicate any card shown here, with sufficient practice.

There are several prepared show-card paints upon the market. I have found Letterine, especially the black, to give the best satisfaction. It dries quickly and leaves an excellent



Styles of lettering used by Mr. Creutz.

ment of the would-be card-writer is practice. My advice to those wishing to become proficient in this work is—obtain some good book treating upon this subject and study the alphabets contained therein thoroughly. Note carefully the formation of each letter of the various alphabets. Select some simple alphabet such as No. 1 shown here and practice making the different letters until you are able to make any one correctly without referring to the copy. Try and master alphabet No. 1 before attempting No. 2.

THE TOOLS AND PAINTS.

Buy only the best tools. You will need two or three red sable brushes, say sizes 6, 8 and 12, to start with. Do not use camel's-hair brushes. All cards shown here were made with a No. 12 red sable brush having a quill



Specimens of Mr. Creutz's show-cards.

finish. I prepare most all white and colored paints myself. For white, use zinc oxide c. p. Make a thick paste of it in a mortar with mucilage. Then add water until the oxide assumes the consistency of cream. Pour the paste into jars and allow to stand several days before using as it improves by age.

Colored paints are prepared in the same manner by using dry colors instead of zinc oxide. These home-made paints will also be found excellent for painting signs upon window glass as they can be easily removed with

water. Red lead makes an excellent orange shade for use on colored cards, especially for border-lines on a bright-red card lettered with white, as are the two rose lotion cards shown here.

MAGAZINE COVERS HELPFUL.

The illustrations on these cards were cut from the covers of the *Saturday Evening Post* and carefully pasted on. The Nyal face cream card was dark blue, size 11x22 inches, lettered with white and outlined with orange. Illustrations such as shown here help greatly to improve the appearance of cards advertising toilet articles, etc. Keep a file where all such pictures found in magazines and trade papers are placed for future use.

The other cards shown here were painted with black letterine upon white and need no further description except that the larger cards

were 14x22 inches. A "Corn Huskers' Lotion" sign was made by pasting white writing paper over a frame 3 by 6 feet in size, the lettering being black and border-lines red. Large signs such as this one, placed in front of a store, greatly stimulate the sale of goods advertised. They, at least, are not expensive to make.

In conclusion, I wish to say, do not become discouraged if you cannot make A No. 1 cards at the first attempt. If you are willing to give an hour each day for a month to practice, you will be surprised at what you can accomplish at the end of that time, providing you are sincere in your efforts. This work will be found very fascinating. After you once "get the hang" of it, you will not stop until you are able to make as good cards as I have shown here, if not better.

"MY BEST ADVERTISING SCHEME."

Three Live Plans—Voting Contests as a Means of Stimulating the Sale of Christmas Goods—Hiring Youngsters to Canvass Their Friends in the Interests of the Store—Schemes that Will Be Found Especially Remunerative During the Holiday Season.

A DOLL VOTING CONTEST FOR THE HOLIDAY SEASON.

By JAMES H. MILLER, CHRISTIANBURG, OHIO.

Our Christmas advertising scheme last year was a voting contest. I bought a doll in Sep-

tember and had the cards printed in October. In the November issue of the BULLETIN last year, I saw Frost & Maffit's report of the contest held by them the year before. We gave a first and second boys' prize and a first and second girls' prize. At first we were rather disgusted with the contest. It required so much explanation. There were the usual knockers. Some in the country said it was no use to try, as the town children would get all of the prizes. Some in town said no one but the doctors' children stood a chance as they bought so much medicine.

Finally, however, more interest was shown. Some worked pretty hard electioneering for their little friends, with the result that our sales the week before Christmas were \$337. We did not carry any expensive toilet or fancy sets. The highest priced was \$3.50. Sales consisted mainly of 10-, 25- and 50-cent goods. The sales for the month were \$130 more than those of December, 1909. And the expense amounted to about \$12 for tickets, prizes, advertising, etc., so that we feel that we were paid for our trouble.

Another season we want to get all the

VOTING CONTEST

To the Boy receiving the greatest number of votes,
an Acetograph or Post-card Lantern, - Value, \$5.00
Second Prize, The American Boy for One Year.

To the Girl receiving the greatest number of votes,
a Fine Dressed Doll, - - - Value, \$5.00
Second Prize, an article selected, - - - " 1.00

One vote with every 10c. purchase. 12 votes with every \$1 purchase.
(Contest begins Nov. 25, and ends Dec. 25, 1910.)

PRIZES ON DISPLAY AT MILLER'S DRUG STORE,
CHRISTIANBURG, OHIO.

I vote for.....
Amount of purchase, \$.....

The voting blank used by Mr. Miller.

tember and had the cards printed in October. In the November issue of the BULLETIN last year, I saw Frost & Maffit's report of the

merchants here interested in a voting contest and give several cash prizes. This will help the holiday trade at home. As we are the only drug store here, we shall get our share of the increased trade.

YOUNGSTERS SELLING GOODS ON COMMISSION.

By GEORGE M. STUBBLEFIELD, KIRKSVILLE, MO.

Last year we adopted a sales plan which proved more successful than we had expected. It should interest dealers in other towns.

We advertised: "Wanted, 50 boys and girls

Won't you please remember me to-day if you buy anything in the DRUG LINE and buy it of the Kirksville Drug Company, asking them that I shall have credit for the sale.

Thanking you in advance,

Signature.

The youngsters distributed this blank among their friends.

at once. Light, wholesome work; good pay." We took down the names of those who responded, together with a few brief notes. We then selected applicants from different locali-

Are you willing to help
a boy or girl who is
ambitious to climb up
in the world and do it in
a way that WILL NOT
COST YOU ONE
PENNY, but on the
other hand, will be your
gain? ☞ ☞ ☞ ☞

The front cover page of a large circular distributed by Mr. Stubblefield through the agency of the young canvassers.

ties and from influential families without limiting the number. To them we offered a 5-

per-cent commission on all the sales they could make, reserving to ourselves the right to withdraw the offer at our pleasure. We made it a point to interest those who had not traded with us before. As a result we at once got the trade of the immediate families of the youngsters and gradually succeeded in interesting their friends.

There is no doubt this plan will work anywhere. The cost is a trifle. The advertising benefit is of a permanent nature, as it develops a relationship between the customers and the store, of a personal as well as a commercial character.

Each boy and girl was furnished with the large circular reproduced herewith. This introduced the youngster and the plan. The

☞ I am now in the employ of the Kirksville Drug Co., the Big New Drug Store 3 doors north of their old stand, East Side Square, and this is the way you can help me: When you want anything carried in a big drug store please go there and buy it and ask them to give me credit for the sale. They give me a commission on all my sales to solicit for them.

☞ If you will do this you will get the advantage of the largest stock to select from. You will get prices as low as good goods can be sold ☞ ☞ ☞

R E A D T H I S

☞ Selling drugs requires skill. Inferior medicines do more harm than good. Many drug-gifts do not know what action is expected from certain drugs, nor how to buy good ones and avoid the "fakes." ☞ Now think what my people have to offer. Can't you see you have much to gain and nothing to lose?

☞ They have had long years of experience as druggists, and have the room, the capital and the goods. ☞ ☞ ☞ ☞

☞ Read this list. You will need some of them today, and please remember to ask that I shall have credit for the sale. ☞ ☞ ☞ ☞

Blue Blacking	Court Plasters	Lunch Biscuits
Blue Creaming	Chamois Saline	Solite
Furniture Polish	Absorbent Cotton	Type
Caspar Marbles	Alumina	Point
Talcum Powder	Muzzling Bettles	Gills
Rice Powder	Whipple	Point Brushes
Tooth Powder	Teething Rings	Ammonia
Tooth Creams	Brown Pumps	Quinine
Pace Creams	Springs	Bones
Vaniline	Water Bottles	Campers
Rich Hair	Bed Combs	Fancy Stationery
Glycerine	Rubber Gloves	Tablets
Toilet Water	Rubber Diapers	Account Books
Perfumes	Soap	Pocket Books
Machete oil	Ice	Purses
Alum	Pencil	Hand Bags
Salt	Mucilage	Harmonica
Cough Cures	Pens	Saw Frames
Cold Cures	Hand Mirrors	Cups
Famous Plasters	Crape Paper	Corn Plasters
Headache Tablets	Corn	Roll Paper
Spirits	Bromides	Cigars
Pericardialogen	Fountain Pens	Tobacco

The inside pages of the circular considerably reduced in size.

smaller card which we are also printing served as a daily reminder to the customers. A feature of the scheme lies in the fact that the hand-bills and other advertising matter are distributed free by the young people.

ANOTHER VOTING CONTEST.

By H. H. CASSLES, MGR. CITY PHARMACY, CANYON CITY, TEXAS.

We conducted a very successful voting contest last Christmas, with a large increase in business. We offered a beautiful doll that at retail was worth \$25. We advertised through the local paper that one vote would be given with every 25-cent purchase.

The contest began December 1 and closed December 24 at 10 P.M. It doubled our holiday business. Our cash sales on the last day were \$530. This is the most successful holiday selling scheme I have ever seen tried.

SOME CHRISTMAS ADS.

During the holiday season, thousands of druggists will be making a special effort to sell Christmas goods. We have collected several ads. that will be found useful in getting up newspaper announcements and circulars for house-to-house distribution. They were all used last year by druggists.

A CHRISTMAS CATALOGUE.

A somewhat unusual piece of advertising was distributed from Lutes's drug store. Oran, Mo., last year. The general character can be seen from the title page.

OUR CATALOGUE

1910

XMAS GOODS

Lutes' Drug Store,
"Where the Quality is Guaranteed."

Cover of a Christmas catalogue

The catalogue is in the form of a booklet 4½ by 6 inches in dimensions. The ads. aimed to present the most attractive articles carried in the store, although several things escaped mention for the lack of space.

USED IN A STORE PAPER.

Here are a few ads. borrowed from a store paper issued by Thompson & Hagan, of Christiansburg, Pa.:

Christmas Candies.

This is one of the important items during the holidays, and of course you want the best. We have them in nice attractive packages at 40c, 80c, \$1.20, and \$1.60 a box.

Post Card Albums.

They are becoming a necessity to take care of the numerous cards that are now sent to friends, and a gift of one of them will not be amiss. We have them in various sizes and styles from 10 cents to \$1.00.

Hair Brushes and Combs.

We carry a full line of these in staples and in fancy boxes, suitable for gift making. They will bring up pleasant memories as long as they last. The prices are in reach of the slim pocketbook.

Military Brushes.

These are one of the necessary items of every gentleman's toilet, and no more pleasing or acceptable present could be given than a pair of them. \$1.00 up.

Christmas Cigars.

We pride ourselves on the high-grade cigars we carry at all times, and our Christmas line is no excep-

HUMMA'S CHRISTMAS STORE!



For the "sweetheart wife" —
Real presents for real men —
The key is not forgotten —

GIFTS FOR EVERYONE —
FATHER, MOTHER, SISTER, BROTHER, SWEETHEART, AUNT, UNCLE, and COUSIN. Gifts too that Everyone will appreciate and that will long remain as a token of your esteem and love. ¶ You will be twice as happy when you give a present that is appreciated and you will have no trouble in selecting such a one at our store. ¶ Come soon and look over our stock, and you will be sure to find that which will give happiness to you and others. ¶ Judicious buying on a large scale enables us to offer you quality presents at a price you will appreciate. ¶ Make your presents bring happiness to the tomorrow as well as today. HUMMA'S selections will do it.

For the girls —
Xmas tree decorations —
Christmas Candles —
Baskets —

Novelty —
Framed pictures —
Mail Santa's letters —

Fountain pens —
Leather goods —
Art Brass Plated Goods —
Dolls —
Post card albums —

Books —
Xmas tree decorations —
Christmas Candles —
Baskets —

O. B. HUMMA, Sheldon, Illinois.

A reproduction of a full-page ad. in a local paper distributed by O. B. Humma, of Sheldon, Illinois.

tion. We have our stock put up in small boxes especially for the holiday trade and gift making, and you need have no hesitancy in buying a box of any of the brands we carry. They are a gift that will be appreciated by your husband, brother or beau. Boxes of 12, 25 and 50 at 50c, 75c, \$1.00 and up to \$5.00.

French Briar Pipes.

We have a nice line of these popular pipes, both plain and gold mounted, in cases, amber bits. They make a present that is appreciated. \$1.25 to \$4.00.

Christmas and New Year Cards.

These are something that is always appropriate, and

come within the reach of all. None so poor that cannot afford to send an absent friend a remembrance at this glad season. Our stock is full. Come early before they are picked over; 2 for 5c, and 5c.

Tasteful Stationery.

There is nothing that you can give for a Christmas present that is more useful or appropriate than a box

Check your Christmas wants from this list.

FOR THE LADIES	FOR THE MEN
<p style="text-align: center;">MANICURE GOODS</p> <p>BUFFERS SCISSORS FILES COMPLETE SETS BRUSHES AND COMBS HAND MIRRORS TOILET SETS PERFUME ATOMIZERS SOAP BOXES</p> <p style="text-align: center;">STATIONERY</p> <p>HIGH GRADE BOXES XMAS BOOKLETS XMAS CARDS CREPE PAPER PERFUMES TOILET WATER COLD CREAMS</p>	<p style="text-align: center;">SHAVING GOODS</p> <p>BADGER LATHER BRUSHES GILLETTE SAFETY RAZORS AUTO-STROP SAFETY RAZOR SHAVING MIRRORS</p> <p style="text-align: center;">PIPES, ETC.</p> <p>CIGARS BY THE BOX CIGAR CASES FANCY PLAYING CARDS HAT AND CLOTHES BRUSHES FOUNTAIN PENS MILITARY-HAIR BRUSHES RUBBER SPONGES</p> <p style="text-align: center;">CONFECTIONERY</p> <p>BELLE MEAD'S SWEETS GILBERT'S LOWNEYS, IN HOLIDAY PACKAGES</p>

Why not give the children a Kodak?

DETROIT DRUG CO.

A Christmas circular used by the Detroit Drug Co.

of nice stationery such as you find here. We have just received a lot of local name box paper, embossed. This will make an especially nice present, and only 19 cents. Others at 25c, 35c, 40c and 50c.

Ink Stands.

A nice ink stand always sets off a gentleman's desk, and we have a nice selection of these useful articles. 25 cents up to \$1.25.

MORE STORE PAPER ADS.

Sherwood's Pharmacy of Cleveland also publishes a store paper and takes that means of offering holiday suggestions. Here are two of the Sherwood ads., reproduced in "solid" form instead of the original "display" type:

Number 1:

High-Grade Manicure Sets.

It's not at all likely that you ever saw a more artistic line of Manicure Sets than ours. That sounds like a bold statement—and it is, but the truth is greater than the boldness, and it's hard to make the truth too strong.

Every one is the very essence of refined taste. It is the kind made to use—the kind it's a pleasure to buy and give, because you KNOW the sterling worth. You can see it.

The prices range from \$1.50 to \$6.00.

A nice inexpensive gift. A specially priced manicuring outfit containing:

- One Nail Buffer
 - One Magic Nail Stone
 - One Bottle Magic Nail Bleach
 - Six Linen-lined Emery Boards
 - One Velvet Finish Nail File
 - One Orange Stick
 - One Book Talcum Complexion Leaves
- All for 43 cents.

Number 2:

Perfume Atomizers.

If you would get all the real fragrance from your perfume use an Atomizer. The perfume is evenly distributed—none is wasted, and as the spray is produced the alcohol evaporates, leaving only the fragrance.

Especially for Holiday Trade, we selected a line of real worth and beauty which has never been excelled in the city.

It contains an appropriate gift for man or woman, and our prices are so very reasonable that people with limited means can afford one.

An atomizer is something that can be used by a lady

THE QUALITY DRUG STORE

CHECK YOUR CHRISTMAS WANTS
FROM THIS LIST

FOR THE LADIES	FOR THE MEN
<p>Cut Glass. \$1.50 to \$5.00 Hand Mirrors. 50 to \$5.00 Toilet Sets \$1.50 to \$15.00 Perfumes, all makes. 10 to \$10.00 Toilet Waters. 25 to \$5.00 Puff Boxes. 50 to \$1.50 Box Candies (Belle Meade-Sweets). 15 to \$5.00 Don't fail to see our imported French Gifts in pure white—something new</p>	<p>Jewel Cases-Gold. 75 to \$4.00 Jewel Cases-Silver. 50 to \$3.00 Fancy Stationery. 25 to \$5.00 Portune Atomizers. 75 to \$1.50 Hot Water Bottles. 75 to \$4.00 Brushes and Dressing Combs. 50c up Men's Dressing Combs. 25 to 75 Stationery Fancy Soap</p>

HOLIDAY LETTERS

Of course you want your gifts to look attractive—we have just what you want for this purpose—Xmas Cards, Tags, Seals, Stamps, Plaques, White Tissue Paper, and Holly Boxes of all shapes and sizes. A Holly Box adds greatly to the appearance of a gift, we have them in strong heavy stock, gold traced holly, poinsettias and bell patterns in exclusive designs.

YOU ARE CORDIALLY INVITED TO COME IN AND LOOK AROUND

Gleghorn's Quality Drug Store,

111 WEST MAIN STREET
WAYNESBURG, PENN'A

A Christmas mailing card 9½ by 7½ inches. It was folded once lengthwise, fastened with a metal clip, and sent out as a post-card under one-cent postage.

every day in the year. They are here from 50 cents to \$3.50.

Leather Handbags.

We have quite a fine variety of these indispensable articles of travel at prices that will appeal to your purse. We have the novel shapes and the large roomy kind for carrying all your purchases. Note the small prices, \$1.00, \$1.25, \$1.50 up to \$6.00, and every one full value.

Manicure Sets.

We have these in separate pieces and in sets. There is nothing that appeals more to ladies of refinement than a nice article for her toilet, and these you can count on as being first-class. They are appropriate at all times of the year, but especially should they

appeal to you as a nice gift for the holidays. Prices are moderate, 75c to \$5.00.

Toilet Sets.

These come in nice boxes, silk-lined, and contain Hair Brush, Comb and Mirror, and some of them have the combination with all the manicure instruments. We are the recognized leaders in this class of goods for the holidays. No lady's toilet is complete without these articles. They come in various designs and at prices that will please you. 75c to \$10.00.

Shaving Necessities.

Shaving Brushes, 25c, 50c, 75c and \$1.00.
Shaving Mirrors, 75c up to \$3.50.
Shaving Sets, mug and brush, \$2.00.
Razors, both safety and old style, 25c to \$2.50.
Shaving soaps, creams and talcum powders, to use after shaving. All the popular kinds.

Smokers' Sets and Ash Trays.

Some novel designs in these attractive presents. From \$1.00 up.

A THANKSGIVING WINDOW.

This is a good November trim. It was used last year by J. E. Taylor, of Gridley, Illinois. A rich-plumed turkey displayed against a setting of national colors was the main feature of attraction. A large wish-bone on the right conveyed a greeting to the passers-by.

The products displayed were not peculiar to

indicated, these compounds were intended to relieve the overburdened stomach. The placard read: "Proclamation! We are headquarters for just what you will need the day after."

Presumably the bird in the center lost its head on Thanksgiving day, putting an end to the trim. The whole arrangement was simple.



A trim arranged by J. E. Taylor, Gridley, Ill.

the season, although this trim may well be used to exploit the spices and flavoring agents needed in dressing poultry for holiday feasts. Among the preparations exhibited were fig syrup, celery and iron, sodium phosphate, and pepsin cordial. As the sign above the turkey

Too much variety in a window lessens its effectiveness. The three colors in the flag were enough to attract any one's attention. This display was made last year, as may be seen from the sign under the huge wish-bone at the right of the window.

A PROSPEROUS SOUTHERN DRUG STORE.

Letaw's Pharmacy in Birmingham, Alabama—Started Five Years Ago in a Small Way—Today One of the Most Successful in the Big Mining City—The Owners and a Short History of Their Growth.

Birmingham, Alabama, famous the country over for its iron mines, has undergone a rapid growth in the last decade. And the progress of pharmacy in that city has kept pace with the industrial development that has been going on there. Only recently the Messrs. Letaw



Hyman H. Letaw, junior partner.

completely remodeled their drug store at a cost of eight thousand dollars. A formal opening was held at which every man, woman and child in the country was made welcome. Adding to the cordial nature of their reception were souvenirs, flowers, refreshments and music. The occasion was a gala day for David and Hyman H. Letaw, the successful proprietors of the place, for it marked the fifth mile-post in their career in Birmingham, one which has been attended with much effort.

The two Letaws are young men, natives of Warsaw, Russia, the home of Kosciuszko, the noted revolutionary leader. Coming to America in their early youth they studied pharmacy in New York. Liking the metropolitan experience, they remained there several years. David Letaw worked in a large

drug store, Hyman Letaw served as chief apothecary at the Lincoln Hospital. On going to Alabama each went into business separately, but after a few years the two moved to Birmingham, where they formed a partnership.

The accompanying illustration of their new store shows how well the combination has prospered. Situated in the City Hall building on the corner of Nineteenth Street and Fourth Avenue, the pharmacy now occupies two whole stores, an intervening wall having been removed to double the floor space. The new pharmacy is one of the prettiest in Birmingham. The soda fountain is a handsome



David Letaw, senior partner.

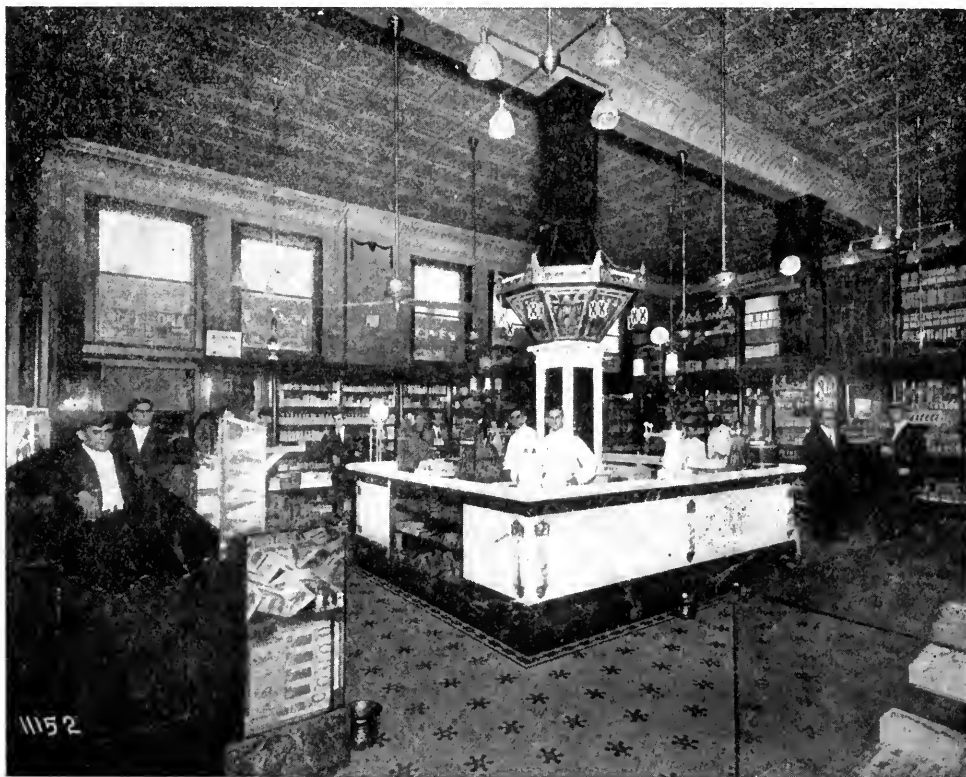
one and is located in the center of the store, as may be seen from the engraving. The total cost of the fountain installed was \$4500. The Japanese parasol surmounting a marble hexagonal column in the center looks extremely pretty, especially when illuminated. The

fountain is distinctly rich in material and design.

The cigar stand in the front of the place is a complete store in itself. It is accessible

est possible time. The youths mounted on the machines are experts at delivery work "just within the last limit of the speed law."

The rapid growth of a business now only



The Letaw pharmacy in Birmingham, Alabama, recently remodeled at a cost of eight thousand dollars.

through large doors, and the line of cigars, imported and domestic, tobaccos, and smokers' supplies is unexcelled.

The motorcycle delivery service makes possible the immediate delivery of any article or prescription, in Jefferson county, in the short-

five years old is a tribute to the popularity and methods of the owners. Fair dealing, careful buying, and attention to the small as well as large customers, are a few of the qualities that have contributed to their success in so short a time.

AN EASTERN STORE OPENING.

The Cahoon-Lyon Drug Company of Buffalo Opens a Fifth Pharmacy in the Heart of the City—Crowds Throng the Building Until the Doors are Closed.

The new store of the Cahoon-Lyon Drug Company in Buffalo was opened recently under auspicious circumstances. To celebrate the event the company gave away more than \$250 in checks and much valuable merchandise. The big store was crowded throughout the day, but owing to the excellent manner in which the throngs were handled, there was no congestion. Modern arrangements and a large

force of clerks united to give a quick, efficient service to the customers.

At 10 o'clock in the morning of the big day the new store, which is situated on the west side of Main Street, between Court and Mohawk Streets, was scheduled to open, but long before that time there was a large crowd of interested persons in the vicinity of the place. When the doors were thrown open there was

a rush for the interior of the establishment. The people were enthusiastic but orderly, and nothing happened to mar the occasion.

SOUVENIRS GIVEN AWAY.

Inside the store flowers and toilet articles were given away as souvenirs to the visitors, and a popular drink was served free at the model soda fountain, just within the doors to the right of the entrance. In many of the departments valuable presents were given to purchasers. The various sections were arranged in an attractive fashion, and the clerks did a record-breaking business. More than 10,000 roses and asters were given away throughout the day, and toilet souvenirs were given away liberally.

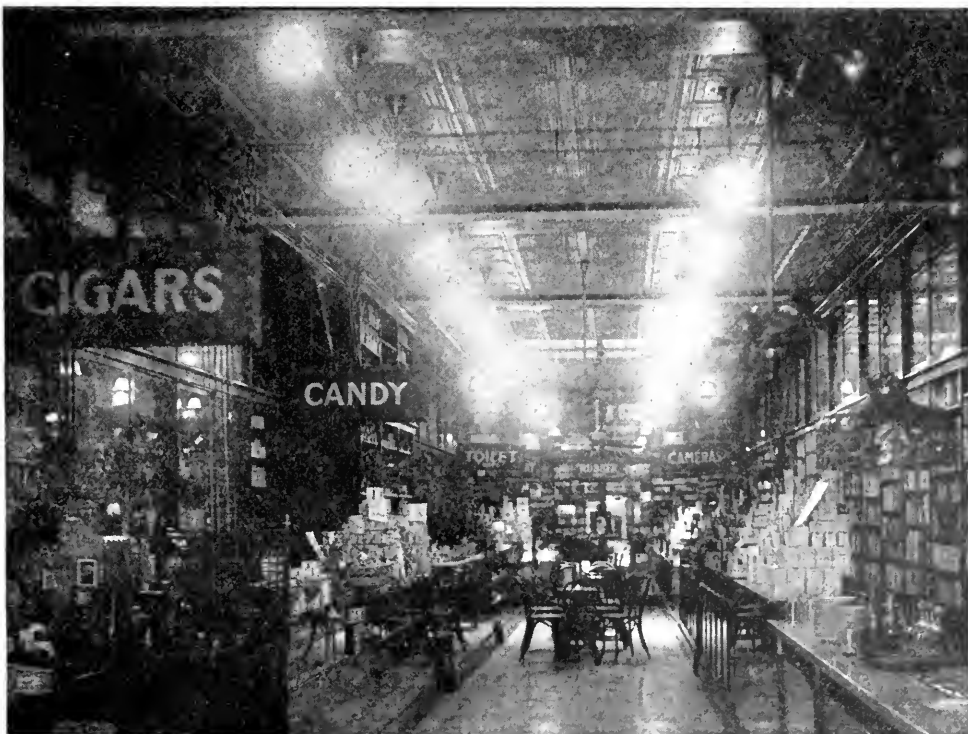
While the crowds were thronging the store, on the roof men were busy in releasing 5000 hot-air balloons. Each balloon contained a check good for a certain sum of money when presented at the new drug store. Checks ranged in value from ten cents to \$10, and were eagerly looked for in all parts of the city. Finders of checks from the Cahoon-Lyon company balloons could cash them in currency or merchandise, according to the statement contained on the paper. Checks were redeemed until 6 o'clock Saturday evening.

The new modern drug store is located in a four-story building, and is complete in every particular. In the basement is the ice-cream plant, which furnishes ice-cream for all five



The new Cahoon-Lyon store in Buffalo.

stores. The main floor is devoted entirely to retail business. It contains the drug department, rubber goods department, toilet department, candy department, stationery depart-



An interior view of the new Cahoon-Lyon store in Buffalo.

ment, cigar department, soda fountains and other features. The interior is finished in mahogany and hundreds of electric lights stud the walls and ceilings and flood the store with light. Unfortunately the fountain is not seen in the engraving. It lends much beauty to the store.

Particular attention is given to filling prescriptions. Five thousand drugs, each in a separate drawer, are contained in the drug department, and the company has installed a double checking system on prescriptions to insure against mistakes. The entire second floor of the building is given over to the photographic department, which is one of the largest in Buffalo. Executive offices and stock-rooms are on the third and fourth floors. All of the floors are brilliantly illuminated day and night, and a perfect system of ventilation has been installed.

ABUNDANT WINDOW SPACE.

Seventy-five thousand dollars has been expended in remodeling the building to meet the

needs of the drug company. The unique front is a feature that attracts considerable attention. There are virtually six windows in one, running "V" shape. No matter at what angle the store is approached some part of the window display is visible. On the opening day the window trim included drugs, stationery, cigars and toilet articles. Under an electric-studded marquee there is an appropriate sign. Arrangements are now being made to place an electric sign extending ten feet upward from the second story. This will flash the Cahoon-Lyon name far up and down Main Street.

The store opened made the fifth retail drug establishment of the Cahoon-Lyon company in Buffalo. Fifteen clerks are employed in this store and Mr. J. P. Boyle is in charge. The company has sixty-five stores in various parts of the east and middle west. The new pharmacy is the center for the Buffalo chain and the stores in Toronto and Syracuse, nine in all, the general offices being located there. Mr. Hammond is the general manager.

PUSHING MY OWN DENTIFRICE.

The Story of a British Druggist Who Established a Demand for a Private Brand of Tooth Powder—Obtained a Scientific Formula and then Advertised the Preparation Locally—How the Scheme Worked Out.

By ESABY.

Recently it became obvious to the writer that there was room in the list of his specialties for a new tooth-powder. Even if one has a satisfactory formula for carboric tooth-powder that is a ready seller, so many cheap varieties have been put on the market lately that it is desirable to introduce something new, something different and distinctive for which reasonably good prices may readily be obtained.

Most carboric tooth-powders are colored pink. Just why it is difficult to say, save that most people like things as they ought not to be. The carmine, rose pink or dye must, by the frequent use of the powder, have some discoloring effect upon the teeth, which is just what we wish to avoid. Then, too, the coloring agent stains the towels, a thing to which the fastidious housewife will object. There-

fore, in formulating the new tooth-powder the first point was to have it of a natural color.

FORMULATING THE PREPARATION.

Next came the selection of the distinctive ingredients. A review of published formulæ and of monographs in books of reference and an examination of some of the popular dentifrices of the day led to the choice of thymol as the antiseptic. We preferred thymol because of its strong germicidal action even in dilute solutions. Its taste was modified by the addition of menthol and peppermint oil.

Powdered Castile soap was selected for its detergent properties. Certain rival antiseptic powders lay claims to a base of which a portion is soluble. They probably contain boric acid and borax as chief ingredients; the latter being finally selected on account of its alka-

linity. It was found, however, that if any larger proportion than about $7\frac{1}{2}$ per cent was used, it was difficult to satisfactorily mask the taste. Various experiments were conducted in order to make the powder pleasant in taste and odor. Saccharin with oils of wintergreen, rose, rose geranium, and terpeneless lemon were finally added to the ingredients.

The foundation of the powder was precipitated chalk with a proportion of tooth-powder basis, probably a variety of kieselguhr, bought from a wholesale house. Except for the basis, which is inorganic, all the ingredients were soluble and all were antiseptic. The final formula read as follows:

Thymol	72 grains.
Menthol	24 grains.
Oil of peppermint.....	160 minims.
Otto of rose.....	24 minims.
Oil of rose geranium	144 minims.
Oil of lemon, terpeneless.....	40 minims.
Oil of wintergreen	80 minims.
Saccharin, .550 soluble	48 grains.
Powdered Castile soap	4 ounces.
Powdered borax	4 ounces.
Tooth-powder basis.....	8 ounces.
Precipitated chalk	$2\frac{1}{4}$ pounds.

The thymol and menthol should be dissolved in the oils in a large mortar before the other ingredients are added, perfect division being thus insured. The powder should, of course, be sifted.

MARKETING THE POWDER.

So much for the making; now for the marketing. The powder was put up in tins holding about 1 and 2 ounces each, the former to sell at 6d., and the latter at $10\frac{1}{2}$ d. each. With a profitable specialty it is worth while going to a little extra expense to turn it out nicely. "The Self-Made Merchant" in his "letters" to his son expatiates on the wonderful effects of "a little gold on the label." So instead of having an ordinary label printed from type, it is at least worth while to have one lithographed in some neat and tasteful design. One may either draw this himself or get specimens from the trade printers. In proprietary articles a good name is often the precursor to just riches, so adequate thought and attention should be given to originating a distinctive name for the powder.

SAMPLING AND ADVERTISING.

As this powder was not expensive to manufacture, it was decided to take the risk of the

cost of a house-to-house distribution of samples. The question then arose as to how the samples should be packed, whether they should be sent out in small tins or wrapped in grease-proof paper. It was concluded that though tins were more expensive than paper, the powder would not lose its strength and freshness in them and that the expenditure of time and labor in packing would be less, so that method was chosen. Of course the little containers were suitably labeled. The drawing up of a handbill was the next thing. The first copy was criticized as being too long and scientific; so it was cut down and written in a more popular vein as follows:

MAKES TEETH LIKE PEARLS.

JONES' ANTISEPTIC TOOTH-POWDER IS A NEW HIGH-CLASS DENTIFRICE OF MODERN TYPE.

Much Science is involved in the making of a good Tooth Powder.

To begin with, the powder basis must be beyond reproach. It must really clean the teeth, but contain no grit to hurt the enamel. It must be of the sort, too, that won't do any harm if a little gets left between the teeth anywhere.

Then come the antiseptics. These must be thoroughly efficient germicides, but of the right kind.

Thymol is the chief of the three antiseptics used in JONES' ANTISEPTIC TOOTH POWDER. It is remarkable that though obtained from plants and non-poisonous Thymol is more powerful than Carbolic Acid. It is just the thing, too, because it prevents fermentation, and fermentation of food particles between the teeth is the cause of decay.

Another antiseptic is a soluble *alkaline* powder which destroys any unhealthy acid condition of the mouth.

Next dental science prescribes the addition of a little pure soap, because nothing helps to clean even teeth like soap.

But people wouldn't use a "good" tooth powder if it were not also "nice." Fortunately perfumes and essential oils are germicidal. So we utilize a choice combination of these and get a dentifrice that after use leaves a sense of refreshment in the mouth and imparts a pleasant fragrance to the breath.

There are twelve effective ingredients which make JONES' ANTISEPTIC TOOTH POWDER an ideal dentifrice. Its regular use carries health to every crevice of the mouth.

It is sold in boxes at 6d. and $10\frac{1}{2}$ d. (double size). If you have not had a sample in your household there is one waiting for your application.

F. JONES, M.P.S.,

PHARMACIST,

LONDON, ENGLAND.

Good Value in Tooth Brushes, at 6d., 9d., $10\frac{1}{2}$ d., and 1/.

The printers offered a choice of papers and

a pretty and distinctive color was chosen which the writer intends to continue to use for other handbills. Envelopes to contain the samples and handbills were ordered, the name and address of the pharmacist being printed at the bottom of the envelope and the words "Something good inside" in clear type near the top left-hand corner.

The distribution of the samples was backed up by a window display and an advertisement in the local paper. A full-size sample sent to the friendly editor resulted in a very good notice in the reading matter of the paper. The envelopes were addressed to the better class of people and to known customers, but sent without address to others. An endeavor was made that *every* house in the district should receive a sample. The doctors have full-sized samples, and the dentists also, if sympathetic. My apprentices have instructions that a sample is to be given to every customer who has not received one and asks for it, to every purchaser of a tooth-brush, and to every one who buys a proprietary dentifrice.

The tooth-powder began to sell from the samples before they had been out six hours, and from the newspaper recommendation before my own copy had been delivered to the paper. All this is evidence that a good tooth-powder should be one of the pharmacist's best-selling specialties.

Real Fresh Drugs.—

French pharmacologists claim that in the usual drying of drugs the enzymes contained in them act during the process and change the character and quality of the drug. For very active and permanent preparations sterilization of the fresh drug by boiling alcohol is found effective, and apparatus are made for that purpose. It is stated that an extract of kola nut made from the fresh drug with cold alcohol is dark in color and contains free caffeine, whereas one made with boiling alcohol is nearly white and contains no caffeine in free state. Comparative extracts made from fresh, sterilized plants and from dried plants show a loss in activity in the case of aconite leaves of 31 per cent, of digitalis of 21 per cent, of aconite root of 10 per cent, and of colchicum corm of 26 per cent.

With belladonna and hyoscyamus, extracts made from the dried drugs were found to be stronger in alkaloids than those made from fresh. On the other hand, tincture of gentian, made with strong, hot alcohol, is more permanent and much stronger in gentiopicrotin than when made with cold, 60-per-cent alcohol.

PROFITS AND EARNINGS

A TEXAS STATEMENT.

A Texas druggist has been in business for five years in a town of 1000 inhabitants. Though he had a hard time getting started, the last two years have been very satisfactory. In discussing his affairs he lays stress on the need of knowing one's expenses. He says that even though the cost and selling price of goods be familiar to the druggist, if he does not know exactly how much it costs to do business, the profits will fall below his own estimate. He submits the following figures of his business:

Stock July 1, 1910.....	\$3,335 13	
Purchases for year.....	8,376 54	
Expenses for year.....	1,400 00	
Net profit for year.....	4,335 67	
		<hr/>
		\$17,447 34
Stock July 1, 1911.....	\$ 4,205 66	
Sales for year.....	13,241 68	
		<hr/>
		\$17,447 34

All accounts considered doubtful were figured off and are not shown in this statement at all. The point our friend observes is the low expense of doing business. There are very few drug stores, he says, doing this volume of business that do not employ more than one man.

The stock on hand July 1, 1910, was \$3335.13. Adding this to the purchases of \$8376.54, we have a total of \$11,711.67. Now the goods left at the close of the year amounted to \$4205.66, which, subtracted from \$11,711.67, gives the cost of the goods sold, \$7506.01.

Adding the expense of \$1400 to the net profit of \$4335.67 we get \$5735.67, which added to the cost of the goods sold gives sales of \$13,241.68.

Adding the cost of the goods, \$7506.01, to the expenses, \$1400, and subtracting the result from the sales, we find the net profit is \$4335.67. Adding \$1400, the expense, we get the gross profit or \$5735.67.

Dividing the expenses, \$1400, by the sales, \$13,241.68, we find the percentage of expense is 10.57. This is altogether too low.

Fourteen hundred dollars will not include

the manager's salary, rental, heat, light, etc. Perhaps the proprietor owns the building and neglected to figure in the rental or interest on his investment. The showing is too good to be true. There must be some omissions somewhere.

Dividing the gross profit by the sales, $\$5735.67 \div 13241.68 = 43.31$ per cent gross profit, which is large. Accepting the estimate of our correspondent for the percentage of net profit, 32.74, we find it extremely high.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THE DRUG CLERK OF THE SLUMS.

To the Editors:

The interesting phases in the life of a drug clerk of the slums are hardly known to his fellow clerks who work in the more "dignified" drug stores.

Of all the martyrs who have been heard from in the history of drugdom, he, poor soul, is the greatest martyr of all! By his fellow clerks and pharmacists he is considered undesirable, inadequate, and unqualified to attend to the ordinary duties of a clerk. He is feared and considered inhuman. Feelings—well, he hasn't any.

Not very long ago, on applying for a position, I was asked where I had worked before. When the prospective employer found that my time had been spent chiefly in a drug store of the slums, he said, "Since your training was among foreigners, who have to be treated like cattle, I cannot employ you." Here I was condemned without even a chance to prove my qualifications.

On another occasion, when I applied for a position, the proprietor inquired: "What part did you play in the assassination of a government official?" "No part," said I. "Why do you ask?" "Because," came the reply, "your name looks so anarchistic!"

It is with a view to dispel these ideas and prejudices that I am endeavoring to picture the class of people with whom we deal, and the many requirements and qualifications of our clerks.

The foreigner, on entering the drug store, expects to be treated with courtesy. He feels that the pharmacist, an educated man, is also trained in manners. The clerk, on the other hand, knows what is expected of him and sees to it that his customers are waited on to the best of his ability.

Being a stranger, the foreigner looks to his pharmacist for information of every nature, keeping him as his adviser on all matters. Thus, for instance, he will often come in to ask whether the Cyprus First Reader has any advantages over the Graded Literature First Book, or whether his boy ought to give up school and learn such and such a trade. Such grave responsibilities are laid on the shoulders of the drug clerk of the slums.

The clerk must be well read. He must know



A drug clerk in the slums acting as mentor and information bureau.

where to get his information, for he is in contact with people coming from various countries who naturally expect him to know what they ask. Catering to people of such varied nationalities, the clerk's knowledge is broadened. He is not confined to merely knowing one language. Most of the clerks speak four or five languages fluently, and are familiar with foreign pharmacopœias and drug journals.

Very few of the patent medicines find ready sale in the foreign quarters, for self-medication is considered almost criminal. Good prescriptionists are abundant, and every drug store does a good prescription business. Although the hospitals and dispensaries are competitors, the greatest portion of trade is done at the drug store.

The clerk, besides knowing the language and

his pharmacy, must be a student of human nature. He must know when and what to speak, and each customer must be treated individually.

In view of these facts, is it not fully time for our fellow clerks and pharmacists to dispel the prejudices which have so long existed and been so harmful to the clerk of the slums? Give him a fair chance and he will show you that he is the equal if not the superior of many other clerks. MORRIS HAIMOWITZ, P.D.

Philadelphia.

TEN PRACTICAL SUGGESTIONS.

To the Editors:

Here are ten more ideas that may be of value:

1. Many people call for a "yellow healing powder containing no iodoform." They want a germicidal antiseptic powder for wounds, ulcers, etc. In some localities the following will be found to be satisfactory:

Dithymol-di-iodide1 drachm.
Acetanilide7 drachms.

M. et sig.: Apply locally.

Retail at 15 cents per drachm.

2. Do not do any detail work (with samples) among your physician friends. Every druggist knows the fate of the average sample. At an opportune time show him the formulæ of your own make of pharmaceuticals. If you wait for him to experiment on a case with a "sample" it will be a long time before you will fill one of his prescriptions for that special formula.

3. If you employ delivery boys give each one a number and a book. Keep a record of every C. O. D. package that goes out. Make each boy "check in" at night from *his own book*, keeping tally on your record. You can thus trace every C. O. D. package and amount.

4. Don't buy goods from "mail-order" houses. To the druggist who resents this advice and flares up with "Why not?" we have nothing to say.

5. Don't barter your self-respect, and at the same time commit an outrage on the innate sense of refinement of your customers, by flaunting in their very faces, as it were, a display of suspensories, syringes, etc. The people still possess some rights. One of them is the right to trade with a druggist who has

the proper conception of the "eternal fitness of things."

6. A "fever blister" or lip sore may be aborted by using spirit of camphor persistently upon its first appearance.

7. If you really wish to keep in close touch with your physician friends, send each one a copy of the N. F. accompanied by a statement to the effect that you are prepared to dispense any of the preparations contained therein. [Note: Be prepared!]

8. If you place any value on the good-will of the physicians, don't advertise rank nostrums in your space in the papers.

9. Old-fashioned "turpentine" soap, a good mop, and a pail of pure water, combined with a liberal amount of "elbow grease," will be found to be more conducive to the removal of dirt from linoleum than any of the highly exploited wonder-workers.

10. Don't make a "Devil's Auction" of your window. Group one class of articles at a time. For instance, fill your window with assorted brands of talcums. Then advertise talcums. At another time fill the window with soaps and advertise the soap.

"One thing at a time,
When advertised well,
Will sell many goods,
As many can tell."

Montgomery, Ala. CRAWFORD T. RUFF.

A LETTER WHICH RELIEVES THE MONOTONY OF THINGS.

To the Editors:

I have become very much alarmed over the condition of the BULLETIN OF PHARMACY, and though I am a busy man I cannot but stop and utter a warning which may or may not be too late even now. At this writing the thermometer in our region of the country is hovering between 85 and 90 degrees, but I learn that this is not true of the ice-bound region where you people dwell. Down here in the summertime we do business in the store appareled in trousers and shirt, with possibly the additional luxury of a belt. Our climate is such that we wait upon the best ladies of the land in this costume. As for the ladies themselves, they go without their hats and most of their clothes. At least it looks to a casual observer as though it had about gotten down to hobble skirts and shoe-strings.

But I'm getting a little off the subject. To

return to the matter in hand, let me say that I noticed some months ago that you had adopted a new cover for the BULLETIN a la Southern style, and had asked your friends to tell you just how they liked it. I noticed some commendatory statements afterwards in the journal, and I was surprised!

It seems to me that you have perpetrated a great breach of etiquette in practically taking the coat off your journal and letting it go around in shirt-sleeves. You seem to be oblivious to the fact that cold weather is rapidly approaching. Throwing aside all questions of etiquette, I can see croup, catarrh, pneumonia, and a whole army of ills following in the wake of that coatless journal and ready to pounce on it at the first chance.

Every time I pick up my journal nowadays the first thought is: "I wonder who has been pulling the cover off my magazine!" And now that winter will soon be here, let me advise you to go down to Levi's and get a hand-me-down suit to cover its nakedness—green, red, anything will do. Hoping my warning is not too late, I am, very cordially yours,

Meridian, Miss.

GEORGE W. STAPLE.

P. S.—Remembering the genial philosophy expressed in genial language which has characterized the many articles published by your chief editor, Mr. Mason, I have been trying to write up something as an antidote. The subject which I have had in mind is the following: "Business is war, war is hell, and therefore business is hell when considered with particular reference to the drug business."

TWO PRACTICAL SODA FORMULAS.

To the Editors:

We do considerable soda business and possibly the formulas for a couple of our good sellers will come in handy. At this time of the year hot drinks claim much of our attention. The following is a leader for a 10-cent drink:

Rinse a shaker and cup with hot water to warm them. Into an ounce of warm (not hot) water break one egg and shake thoroughly. In the warm cup dissolve 2 teaspoonfuls of chocolate mixture consisting of powdered chocolate and sugar, 4 to 1, in a small amount of hot water. Add the egg mixture, top with whipped cream or a small amount of ice cream, and a dash of nutmeg.

Our orange soda is a seller and this is the way we make it: Nine oranges are grated and the grated peel ground with one pound of sugar. Then we add the juice of the oranges and thoroughly incorporate enough simple syrup to make one gallon. We serve this in mineral glasses, adding the syrup last. The drink certainly has a true orange flavor.

Millbury, Mass.

WILLIAM C. MOULTON.

SOME MORE GOOD GUESSING.

To the Editors:

I have been a subscriber of the BULLETIN for six years, and I am finally sending you for reproduction an order which was handed to us

*Water verge
Water Verge
Thimble leaves*

by one of our customers not long since. A box of native herbs and some senna leaves were supplied. Such guessers as we have to be!

T. J. DRAPER.

Senatobia, Miss.

THEY CERTAINLY NEEDED HELP!

To the Editors:

We are submitting a letter received recently. It occurred to us that it might prove interest-

Dear Sir
Mr. Anderson
Please send out some medicine
for headache and pain the ears
we all have a bad cold send out
1 bottle of cough syrup. it is more
like new salage the pain goes from
the fore head to the back of the ear.
send out some thing for appetite
be sure to send out some medicine
and pills to kill the pain
can you ~~find~~ any thing else for a
little boy 4 year old he got a pain
in his head and ears just as same
like the rest of them.
yours truly
please charge it to me

Republic Wash.
April 18 1911

ing to readers of your journal. Certainly the family seemed in bad shape!

THE ANDERSON DRUG CO.

Republic, Washington.

DOLLAR IDEAS

DISPENSING OILS IN ELASTIC CAPSULES.

Stewart J. McGee, Berkeley, Cal.: This idea if carried out is the means of making excellent profit on the liquids contained in elastic capsules. Castor and cod-liver oils are the best sellers. Colchicine salicylate, creosote, and creosotal are popular too.

1. Filling.

(a) Have rods bored with holes for holding the opened capsules, one or two dozen each, as shown in Fig. 1.

(b) Keep the tops to melt on water-bath for sealing purposes.

(c) For a small number of capsules use a



Fig. No. 1.

medicine dropper fitted with an atomizer bulb, as in Fig. 2.

(d) For a large number set up an automatic filler with ring stand, as in Fig. 3. Put the oil in a wide bottle. Then invert the bottle in a funnel having a rubber tubing attached, with medicine dropper and syringe shut off as shown in the illustration. Capsules can be filled with

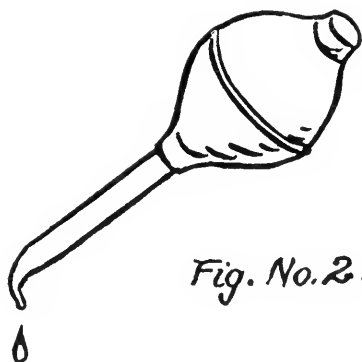


Fig. No. 2.

greater speed this way. If the oil is thick, warm it a little.

2. Closing.

(a) Be sure no oil is left on the edge of the opening, since this will prevent thorough closing of the capsule. Remove all traces of oil by gently brushing the capsule with a small camel's-hair brush dipped in carbon tetra-

chloride. The tetrachloride evaporates immediately.

(b) Dip the wire ring as shown in Fig. 4 into melted gelatin, place the film of gelatin down over the capsule so that it adheres to the

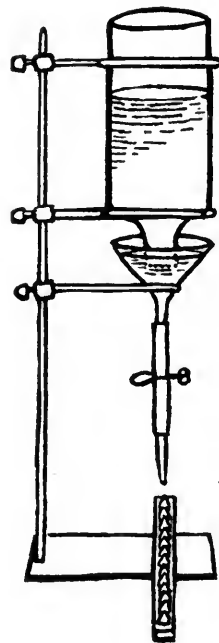


Fig. No. 3.

opening, and then draw away the wire by an upward rotary motion. With the rod held in the left hand, the wire dipped into the melted gelatin kept constantly on a water-bath, very little time is consumed in sealing.

3. Finishing.

(a) Make sure every capsule is tightly closed by testing each one. This is done most quickly by taking one in each hand and gently tapping it upon a large filter-paper or blotter



Fig. No. 4.

placed upon the table. Slowly revolve the capsules while tapping. This test is very necessary, since one leaking capsule will give the taste of the oil to all the rest. Leaky capsules are put aside, brushed with the tetrachloride, and sealed again. Leaks are noticed by the

dark spot which immediately spreads itself upon the paper.

(b) Now put them all into a shallow dish and wash thoroughly with a little tetrachloride by pouring them from one dish to another two or three times. This leaves them as clean and bright as new without the slightest taste of oil.

(c) A convenient stock-container is a plaster-box. It is shallow, strong, and looks neat. Have a well-written label containing the selling price per half dozen and dozen upon the side.

These capsules eliminate the taste of all unpalatable oils and will sell in most every case where mentioned. The gelatin dissolves quickly and the best effect of the oil is obtained.

PRESERVING ESSENTIAL OILS AGAINST A TEREBINTHINATE ODOR.

R. L. Villere, New Orleans, La.: The air and light which are constantly acting upon essential oils are really the cause of this rank smell.

A bottle of any essential oil kept well filled and away from light will remain fresh and free from terebinthinate odor for an almost indefinite length of time.

Essential oil bottles can be kept always filled to the cork by replacing the oil removed by an equal amount of water. The oil floating on top and not mingling with the water is naturally not affected by it.

I have used this process for over 12 years with great success and could submit a sample of oil of lemon of that age which is just as fresh to-day as it ever was.

A FORMULA FOR MAKING BASHAM'S MIXTURE.

H. K. Schwartz, South Bend, Indiana: From time to time you have published formulas for making Basham's mixture. We have a method that requires little time.

We always have two solutions made up as follows:

- (1) Ammonium carbonate,.....90 grammes.
Distilled water, enough to make..900 Cc.
- (2) Acetic acid, U. S. P.....300 Cc.
Water, enough to make.....900 Cc.

One has only to mix equal parts of each so-

lution and he has U. S. P. ammonium acetate solution, as the following formula will show:

125 Cc. acetic acid solution contains 42 Cc. acetic acid, U. S. P.

125 Cc. ammonium carbonate solution contains 12.5 grammes ammonium carbonate.

In the U. S. P. formula, solution of ammonium acetate is used, but here that salt is formed by the reaction between the acid and the carbonate; 100 Cc. of diluted acetic acid and 5 grammes of ammonium carbonate multiplied by $2\frac{1}{2}$ equal 250 Cc. of diluted acetic acid and 12.5 grammes of ammonium carbonate.

250 Cc. diluted acetic acid contain 42 Cc. U. S. P. acetic acid.

FORMULA FOR 500 CC. BASHAM'S MIXTURE.

Acetic acid solution.....	125. Cc.
Ammonium carbonate solution....	125. Cc.
Diluted acetic acid.....	30. Cc.
Tincture of iron.....	20. Cc.
Glycerin	60. Cc.
Aromatic elixir	60. Cc.
Water sufficient to make.....	500. Cc.

A CABINET SUGGESTION.

P. I. Minton, Plainfield, N. J.: Systematize your Diamond Dye cabinet. It will save you time and trouble. Start from the top of the cabinet and number 1-2-3-4-5-6-7-8-9-10 and so on. Next go over your color book and number correspondingly. For instance: If No. 1 in cabinet is brown, look up brown in the book and mark it No. 1, and so on through the whole book. You cannot imagine how much time this saves. Nearly every lady wishes to see the color book, and if she selects green for cotton, you have the number before you. Simply go to the cabinet and pick it out. This same system nicely applies to a Munyon cabinet.

ADHESIVE LABELS FOR COMBS AND BRUSHES.

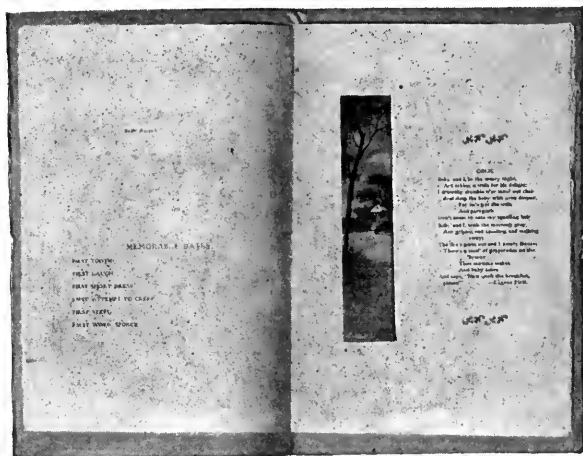
A. C. Williamson, Fulton, Ill.: We always had a hard time marking combs and brushes. Gummed labels will not stick on combs, and tags do not look very good on them, so we take one-inch adhesive tape and cut it up into pieces the size of small labels. These are then stuck on rubber combs and a lot of other things. It is the best scheme we have found yet.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Baby Journal.—

H. W. Lahr, of Glasco, Kansas, has always made a specialty of appealing to mothers for their trade in baby supplies. His method of sending "letters of welcome," circulars, samples and the like to homes where new infants had appeared was described in an interesting article in the June issue of *Modern Pharmacy*. Mr. Lahr's latest step in this direction was to get out what he calls a "Baby Journal." Two inside pages of this unique brochure are shown in the accompanying reproduction, greatly reduced in size. Altogether the brochure contained 18 pages with cover, and the thing was gotten up so artistically that every



mother could be depended upon to keep it permanently. There were several blanks for data regarding the baby, such as the name, the date of birth, the weight from month to month, etc., together with several vacant panels into which could be pasted photographs of the baby. Then there were several verses taken from the poets, while for illustrations there were three actual photographs of scenes in Glasco, as well as several narrow panels like that shown in the specimen pages reproduced in our engraving. The latter were photogravures in color and added greatly to the beauty of the booklet. That every mother would use this baby journal, and keep it permanently, could scarcely be doubted. Mr. Lahr presumably mailed one whenever he learned of the birth of a baby anywhere within reach of his store.

Free Lime-water.—

We have always felt that no druggist should let anything go out of the store without a profit. But for purposes of advertising it sometimes pays to make an

exception to this rule. Charles Minarcik, Jr., of Brooklyn, N. Y., has been giving away lime-water for about a year with a decided increase in his sale of baby foods, milk sugar, nipples, etc. The character of the label used by Mr. Minarcik will be seen from the accompanying reproduction. At the bottom appears an

LIME WATER

WE GIVE IT TO YOU

FREE

To encourage the use of this valuable medicine we make no charge for it.

Don't be afraid to get some when you need it. We always have on hand a fresh supply of all kinds of

BABY FOODS AND NURSERY REQUISITES.

IF IT'S FOR BABY, WE HAVE IT

MINARCIK THE DRUGGIST

LEADER IN QUALITY

352 RIDGEWOOD AVE.

Corner Chestnut St.,

Brooklyn, N. Y.

ad. of baby foods and nursery requisites, the sale of which more than compensates him for the free lime-water.

A Liniment Window Display.—

At the last annual meeting of the New Jersey Pharmaceutical Association, Charles W. Holzhauer read a paper on a liniment window display. Since Mr. Holzhauer is a man of unusual taste in window dressing, his ideas are worthy of notice. To quote:

"What can we do to create a demand for and sell more goods which yield a good profit, instead of over-priced articles which barely pay expenses? This is a question which is of vital interest to every pharmacist.

"Probably the cheapest and one of the best ways in which we can do it is by using the display space of our show windows to good advantage. The value of window displays cannot be overestimated, and if put to good use will return a handsome profit to the store. What class of goods should we show in our windows? Certainly only such goods as will yield a respectable profit.

"Some time ago we arranged a display of a liniment which we had prepared in a small way for a number of years. The trim not only sold the goods while in the window, but also created a good demand afterwards. So, although it is now several months since we made the display, we are still having calls as a result of it. To catch the eye of the passer-by, and to get away from the usual row of bottles often stood upon the floor of the window, we made six small photographs of people in various attitudes,

showing the uses to which the liniment might be put. One represented an old man rubbing his ankle, another rubbing his neck. Another showed a boy rubbing the lame back of another boy, and still another rubbing a sore wrist.

"These pictures we had enlarged and hung them prominently in the center of the window so as to catch the eye of any one passing. Under each picture we suspended a small sign with a few catchy phrases descriptive of the liniment and its uses. The bottles, arranged in pyramids and a large price card upon the floor of the window, completed the display. As a result we sold in two weeks as much of the liniment as we had sold in a year before, and created a demand for it. The total cost was not more than four dollars, yet it attracted the attention of nearly every one who passed by and returned a substantial profit on the investment of money and labor.

"It seems to me that as a rule we do not pay enough attention to one of the most valuable assets we have, namely, giving more thought and attention to our windows, and the class of merchandise to be displayed in them. How often do we see a window full of an article which if even sold at its full retail price will yield only a small net profit, and which is probably cut in many instances to the regular wholesale price to the pharmacist. Is it not foolish for us to give away one of our best assets for nothing, for the display of an article which does not yield anything like an adequate return?"

Some Legends for Show Cards.—

G. R. Thomason, of Stockton, Kansas, keeps cards on the show-cases, changing them each week. Special stands are used for displaying them. The signs are also exhibited in the window. Mr. Thomason finds the plan a very valuable method of advertising, and submits the following text for show-card signs:

THOMASON'S HEADACHE WAFERS

Try a box of THOMASON'S HEADACHE WAFERS.
They are guaranteed.

* * *

IN READINESS ALWAYS.

Whatever your drug store needs are, in season or out, you are pretty sure to find them here. People have come to expect that of us and they are never disappointed.

* * *

STATIONERY.

The very things you are looking for. Everything that's wanted for home or desk.

* * *

ARE YOU GOING

to the country? Here are some things you should take along.

* * *

PROMISE AND PERFORMANCE.

Our aim is to serve you earnestly and honestly—to set before you the world's best in our line with quality above criticism.

No promise without performance.

* * *

DELICIOUS DRINKS

served at our fountain in the most dainty and appetizing way.

Full-page Ads. in the Newspaper.—

The Decatur Drug Co., of Decatur, Ill., has achieved no little distinction as a well-advertised bus-

THE DECATUR DRUG CO.
THE BIG DRUG STORE
H.C. BURKS, Reg. Ph. Mgr. 337-333 NORTH WATER ST.

Brighten Up Your Face STRAW HAT 25c

How Heat Reduces Fat 30c

Wine of Females 30c

WITH AN Icy-Hot 30c

Tell! Death Grip Not Pains 10c

NEURO-TONE 30c

SATI HOW'S YOUR LIVER? 30c

FOR YOUR SILVER TRY RADIUM SHINE 30c

THIS OIL SAVES TOLL 30c

TALCOLETTE A TOILET NECESSITY 20c

DERMA VIVA The Ideal Face Powder 30c

Relief from Asthma in 10 Minutes 30c

YIPPOO 30c

There are some things a drug store cannot afford to do without

BABY SPECIALS FROM OUR BIG COMPLETE STOCKS

NEURO-TONE

SATI HOW'S YOUR LIVER?

FOR YOUR SILVER TRY RADIUM SHINE

THIS OIL SAVES TOLL

TALCOLETTE

DERMA VIVA

Relief from Asthma

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FOR YOUR SILVER TRY RADIUM SHINE

THIS OIL SAVES TOLL

TALCOLETTE

DERMA VIVA

Relief from Asthma

YIPPOO

iness. It runs a full-page advertisement every week in the local paper, which is rather unusual for a drug store. We are reproducing a few of the full-page

THE DECATUR DRUG CO.
THE BIG DRUG STORE
H.C. BURKS, Reg. Ph. Mgr. 337-333 NORTH WATER ST.

Brighten Up Your Face STRAW HAT 25c

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Wine of Females 30c

WITH AN Icy-Hot 30c

Tell! Death Grip Not Pains 10c

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Relief from Asthma

YIPPOO

ads. inserted by this firm in the *Decatur Herald*. While they are reproduced in miniature, they will serve to give our readers some idea of the energetic business methods of this firm.

PRACTICAL PHARMACY

Compound Syrup of Squill.—

C. A. Duncan, of Dallas, Texas, in a paper read before his State association, commented on compound syrup of squill. He called attention to the troublesome character of the official formula and pointed out its tendency to become unsightly after a short time.

The present process requires that eighty cubic centimeters each of fluidextract of squill and senega be evaporated on a water-bath to 100 grammes. Professor Cook has observed that it is extremely difficult to do this at a low temperature. The purpose of the evaporation is to remove the alcohol from the fluidextracts, and the question is asked, why is it necessary to remove this small quantity of alcohol, as other syrups contain even larger proportions of alcohol? Professor Cook also makes the recommendation that the fluidextract of squill be heated to remove the albumin.

Furthermore, the fluidextract of squill contains acetic acid and the fluidextract of senega potassium hydroxide.

After considerable experimentation the following formula was found to produce a beautiful clear syrup that has stood for five months and is free from precipitate at present, there having been no appreciable change:

Fluidextract of squill.....	80 Cc.
Fluidextract of senega.....	80 Cc.
Antimony and potassium tartrate....	2 grammes.
Glycerin	100 Cc.
Purified talc.....	20 grammes.
Sugar	750 grammes.
Solution of potassium hydroxide,	
Water, of each a sufficient quantity to make	1000 Cc.

Heat the fluidextract of squill to boiling, strain and exactly neutralize the product with sufficient solution of potassium hydroxide. Evaporate the fluidextract of senega on a water-bath till reduced to one-third its original volume. When cold mix with the fluidextract of squill and incorporate with the mixture, intimately, the purified talc. Add 350 Cc. of water, filter, and pass enough water through the filter to obtain 400 Cc. of clear filtrate. Add to this the antimony and potassium tartrate previously dissolved in 25 Cc. of hot water. To this liquid add the sugar, glycerin, and enough water to make the product measure 1000 Cc. Dissolve the sugar by agitation without heat and strain.

A number of different methods were employed in the effort to get a satisfactory syrup. With neutralization and without neutralization, with and without evaporation, with and without glycerin, and of all the samples made the only one worthy of being called a syrup to-day is the one made by the process submitted.

Mr. Duncan expressed his obligation to C. A. Allen and M. L. Zacha for laboratory work and suggestions made while conducting this series of experiments.

Sanitation in the Store.—

J. Leon Lascoff, in a paper read at the last meeting of the New York State Pharmaceutical Association, declared that the hygiene of the drug store is a matter of great importance, especially in the prescription department. But he went on to say that little or no attention is directed toward proper sanitary conditions; and, strange as it may seem, the appearance of the prescription department is usually indicative of very unhygienic surroundings.

"It shows in the mixture, pill, capsule, powder, ointment, etc., and in the cork, bottle, and label. A prescription counter made of wood is not sanitary, as wood is absorbent and takes in the oil and greases. I personally use a glass-covered counter backed up by a green-colored billiard cloth, which prevents the glass from cracking, and the color is pleasing to the eye. The glass is easily cleansed and no absorption takes place. For making ointments, I have also a glass slide tablet which can be pushed in and out as necessity demands, and which is easily washed with a little alcohol or ether.

"Rolling the pill mass with the fingers (which as a rule are not clean) is a very unsanitary method. I have for the past few years been trying to devise a method of overcoming this habit, and am now using a blower (as per demonstration), which helps to soften the mass and also makes it easier to roll the pills out in good shape with the assistance of the pill-roller, thus avoiding the use of the fingers as much as possible.

"There are other important truths in regard to sanitation which I will not at this time point out, such as the method of filling capsules with the hand, especially in summer-time; but will reserve all these for some special paper. From these facts you will see how the physician who visits your prescription department will observe your methods and the sanitary procedure displayed by you, and will gladly recommend you in preference to another pharmacist less sanitary, especially when the physician himself is thoroughly trained in sterilization. This again will help build your reputation."

Surprising Variation in Prescription Bottles.—

E. F. Heffner, in a paper read before the Pennsylvania Pharmaceutical Association, pointed out the vana Pharmaceutical Association, pointed out the same size. As a rule they do not run even, which makes it necessary to measure a prescription in a graduate before emptying it into the container. The wisdom of that precaution may be seen from the following data showing the capacities of one dozen of each size of the regular graduated trade bottles:

Supposed ozs. capacity.	1	2	3	4	6	8	12	16
dr.	oz. dr.	oz. dr.	oz. dr.	oz. dr.	oz. dr.	oz. dr.	oz. dr.	oz. dr.
8	2	2 6	3 6	6	7 6	11	16 5	
8 1/8	2 1/8	3 3/8	3 3/8	6 1/8	7 6	12	16 3/4	
8 1/6	2 1/6	3 1/6	3 6	6	8 1/2	11 7	16 4 1/2	
8 7/12	2 7/12	3 2	4	6	8	11 7	16 1	
8 3/8	2 3/8	3 1	3 6	5 7	7 6	11 4	16 3	
8 1/4	2 1/4	3 1/4	3 5/8	6 1	7 5/8	12	16 3/8	
8 3/4	2 3/4	3 1 1/4	3 6	6	7 0	11 6	16 1/2	
8 1/2	2 1/2	3 1 1/2	3 5/6	6 1/2	7 1/6	11 7	16 3	
8 1/3	2 1/3	3 1 1/3	3 6	5 7/8	7 7/8	12	16 3/3	
8 2/3	2 2/3	3 1/2	3 6	5 7	8	11 7 1/2	16 1 1/2	
8 1/2	2	3 1	3 7	6	8 3	11 7	16	

These results show a variation in some cases of 15 per cent below or above the proper capacity. And when one fills a bottle full that holds 15 per cent more fluid than it normally should, the patient receives 12 1/2 per cent less than the physician ordered. When, on the other hand, the bottle is 15 per cent under capacity, the dose taken by the patient is 18 per cent in excess of the amount prescribed.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Scintillations.—

Gitalin is the name of another glucoside isolated from digitalis. Being the last it is "the thing."

The annual production of radium at the Joachimsthal factory is about 28 grains—a little more than 2 grains per month!

Alundum crucibles are replacing clay because they last much longer and are more refractory. Platinum can be melted in them. Alundum is fused alumina.

Dr. Austin Miller says that hexamethylenamine in doses of 15 grains, four times a day, will if taken at the beginning abort a cold. It should be accompanied by copious water-drinking.

Professor Dixon says that synthetic emodin is a failure as a cathartic because it is absorbed too readily. In rhubarb, cascara, aloes, etc., the extractive matters hinder absorption of the emodin and a better action is obtained.

Ferrous salts can be completely extracted from an aqueous solution by shaking with a benzene solution of naphthene acid, which dissolves them. This method may be used for separating iron from other salts.

The nearest approach to artificial daylight is obtained by passing the light from a tungsten lamp through blue and green glass and a film of gelatin colored with rosazene. The loss in light is considerable.

The present price of highest-activity radium salts is \$5200 per grain, but it is not steady in the market. The United States contains no radium-containing minerals of commercial importance.

A Food or a Stimulant?—

Dr. W. H. Thompson insists that beef extract has both a direct and an indirect nutritive value. He found that when beef extract was given to dogs mixed with a standard food, the dogs increased in weight from 10 to 20 times the amount of beef extract given. He further states that beef extract augments the digestive power of the gastric juice, and thus acts as an indirect nutritive. He does not admit that it is merely a stimulant, but claims for it important nutritive value.

The New Atom.—

A Russian chemist now defines an "atom" as "an object such that division of it gives rise to objects of another order." Thus an atom of an element is composed of electrons and may be resolved into atoms of a lower order. A chemical element is "a complex which has certain characteristics and occupies a definite position in the periodic system."

The Elixir of Life.—

Two French chemists claim that buttermilk which has been obtained by the natural souring of milk contains more lecithin than fresh cow's milk, and as much or more than human milk. They say that the lecithin adds greatly to its value as a food, and also gives it an important medicinal quality.

Purer Foods.—

E. Gudeman says that an alloy containing as little as 0.5 per cent of gold has been found which can be used to cover the iron in cans to be used for food, and which is as resistant to corrosion as gold itself. Two ounces of gold in this form will cover a ton of iron, and will cost 12 to 15 times as much as tin plate. He thinks that for canned foods it is worth while.

Sanguinarine.—

A Russian chemist claims that sanguinarine does not exist in bloodroot as a salt, but is in the form of a more stable compound, the salts of which have a red color and which hydrolyze in aqueous solution and yields sanguinarine. This may explain why preparations of bloodroot are not stable.

BOOKS

ANOTHER EDITION OF GOULD'S POCKET MEDICAL DICTIONARY.

This is the sixth edition of Dr. George M. Gould's popular book. The author explains that it has been made necessary by the rapid enlargement of medical terminology, and by the constant addition of new words to the language. The present book has 142 pages more than before, while the number of new words has increased by nearly 5000. The total number of words now defined is 34,613. Gould's medical dictionaries are of course standard books in the language, and no further praise of them is needed at this time. The Pocket Dictionary costs \$1.00 and is published by P. Blakiston's Sons & Co., 1012 Walnut Street, Philadelphia.

THE CLERKS HAVE A JOURNAL.

The first issue of "The Drug Clerks' Journal" has found its way to our office. It is the official organ of the California Drug Clerks' Association, and it is a live representative of a live society. The C. D. C. A. has done things. It has brought about shorter hours, better compensation, sick benefits, death benefits, Sunday closing, and has conducted an employment bureau successfully. The editor of the Journal is Will E. Murphy, vice-president of the association, and the business manager is J. S. O'Callaghan. The first issue contains a history of the organization and has a number of excellent articles from well-known pharmacists and clerks on the Pacific coast.

The School of Pharmacy of the University of Wisconsin has reintroduced the practice of publishing "Contributions from the Department of Pharmacy." The first number is a pamphlet entitled "On the Addition of Organic Acids to Unsaturated Hydrocarbons." The author is Arthur L. Sievers. Another bulletin in the series is now on the press and will soon be issued. These "Contributions" will be devoted to theses written by undergraduate and graduate students of the department of pharmacy of the university.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Non-freezing Solutions for Automobiles.

H.'s Drug Store.—The automobilist, in the selection of a non-freezing solution, is interested mainly in two things—first, the action of the solution upon the circulating system; and, secondly, upon the ability of the solution to withstand high and low temperatures.

Whenever salt solutions, such as calcium chloride, sodium chloride, etc., are used, two corrosive actions, chemical and electrolytic, take place. Calcium chloride is apt to contain hydrochloric acid, which, if not neutralized, will attack all metals, and directions for its preparation invariably include a warning to test for acidity and to neutralize by addition of an alkali before using. It is, however, a well-known fact that a caustic solution is just as destructive as an acid forming the hydrates of the different metals constituting the circulating system. Chemical action, although very serious, is probably secondary in its destructive effect to electrolysis. The latter action universally occurs where a salt solution is employed and causes a very rapid eating away of the parts.

Glycerin possesses certain characteristics which, to all appearances, would seem to make it an excellent non-freezing agent. It boils at an extremely high temperature and its freezing point can only be reached by artificial means. The cost is a consideration, however, as glycerin is exceedingly high and, unless commercially pure, is apt to contain fatty acids and produce destructive chemical action. It is conceded by leading authorities that it does destroy the rubber connections and after a short period becomes foul, thus necessitating frequent renewal.

Wood alcohol has been greatly favored for this line of work. In the presence of heat and oxygen, however, wood alcohol has a slight tendency to form formic acid, which might in time corrode the parts. It boils at a lower temperature than denatured alcohol, and consequently less of the latter is required, and as the tendency to evaporate is materially reduced, denatured alcohol is much cheaper to use for the purpose.

Alcohol (denatured) is the ordinary alcohol of commerce which has been made unfit for use as a beverage. It has absolutely no corrosive action on any of the metals with which it comes in contact, and its ability to withstand cold is indicated by the fact that it freezes at about -160° F. Its composition is necessarily uniform, because it is manufactured in accordance with a formula prescribed by and under the supervision of government chemists. It contains no solid matter, thus making it unnecessary to filter before

using and eliminating all danger of its clogging the radiator.

20-per-cent solution freezes at about 10° above zero.

30-per-cent solution freezes at about 5° below zero.

40-per-cent solution freezes at about 20° below zero.

50-per-cent solution freezes at about 35° below zero.

Roup Cures for Chickens.

F. B. K.—H. C. Fueller, Grafton, West Virginia, sells granular copper sulphate as a roup cure, coloring it with aniline red. Twenty five-drachm packages sell for fifty cents. The customer is directed on the label to dissolve one teaspoonful in a gallon of soft water. The resulting solution is drunk by the chickens, and their heads are also bathed in it if they are sore.

The following is the formula of a favorite roup remedy. It is put up in a wide-mouth bottle. The sufferer's head is held over it in such a manner as to compel the inhalation of the fumes:

Carbolic acid.....	2 drachms.
Ammonium carbonate (in fragments).....	1 ounce.
Terebene	1 drachm.

The patient should be held up by the feet for a few minutes night and morning, before the inhalation, as a lot of fluid will escape from the mouth and nostrils, affording the medicaments much better access to the diphtheric membranes. Unless the birds affected are particularly valuable, it is advisable to destroy them before the rest of the flock becomes infected.

Roup is a very dangerous and often fatal disease among fowls. It is a germ disease which finds victims among fowls that are debilitated or run down by exposure to cold or dampness, poor ventilation, dirty and lice-infested quarters, etc. The disease usually starts with a "cold in the head." Among chickens this is manifested by sneezing, inflammation of the membranes of the head, discharge from the nostrils which accumulates into thick masses.

Perhaps the most practical way of treating the disease is to separate the unaffected birds, keeping them in new, clean quarters which are dry, airy and wholesome. Disinfect every day with a $1\frac{1}{2}$ -per-cent solution of some reliable coal-tar dip, giving special attention to the feed- and drinking-vessels. The affected birds should be given the same care and in addition the mouth and nostrils should be washed out with a 1-per-cent solution of the dip, using a small syringe or medicine dropper for the purpose. Mix a few drops of the coal-tar dip with the drinking-water, and be especially careful to disinfect the buildings, etc., every day.

Casein Massage Cream.

F. W. D.—The following formula devised by Mr. Cooban has been commended considerably:

Skimmed milk.....	1 gallon.
Hydrochloric acid.....	1 fluidounce.
Boric acid.....	1 ounce.
Oil of bitter almond.....	20 drops.
Oil of rose geranium.....	30 drops.
Oil of sweet almond.....	$\frac{1}{2}$ fluidounce.
Solution of carmine.....	sufficient to tint.

Add to the milk one gallon of hot water—hot enough to raise the temperature to about 80° F. Mix the hydrochloric acid with one pint of water, and add this to the diluted milk slowly, with constant stirring sufficient to completely coagulate the casein, which separates in a finely divided condition. Allow the mixture to stand for an hour, collect the precipitate on cheese-cloth, and after draining return the mass to the vessel and add two

gallons of water. Stir the coagulum, breaking up any masses that may form; pour off the water and wash again. It is necessary that all of the acid and whey be washed out of the casein. Collect on strainer and squeeze out all the water possible, then transfer to a mortar or other suitable vessel and incorporate the boric acid. Transfer to a cheese-cloth bag, suspend this from a shelf or other suitable place, and allow it to hang for thirty-six to forty-eight hours, squeezing the bag occasionally. The mass contracts and forces water from itself, and it will take about two days to get it all out.

The casein will then be found quite dry and granular. Transfer it to a mortar, rub it as fine as possible, put in about one ounce of dilute alcohol (enough to moisten), and then add the oil of sweet almonds and perfume. Tint the product with the solution of carmine. Add sufficient water to form a soft paste, beat all together until uniformly mixed, and then run through a paint mill and bottle it at once, or else put it up in collapsible tubes. It dries out very rapidly, and must be put into packages immediately.

Hydrogen peroxide in a cream soon decomposes, but if you wish to incorporate that ingredient you might try replacing the water with a solution of hydrogen peroxide when making the paste toward the last of the operation. Many other formulas for massage cream have appeared in the BULLETIN before. Consult the annual indexes in the December issues.

Several Questions from One Man.

N. B. submits three queries:

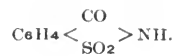
1. "What is the difference between natural and synthetic methyl salicylate?"

The best way to tell the difference between the two is to take a dose or better repeated doses of each. The synthetic product sometimes irritates the stomach owing to the presence of phenol bodies from which it is derived. Natural oil of wintergreen made from oil of birch or oil of wintergreen on the other hand is not so likely to set up a gastric disturbance. Chemically the two bodies are said to be identical, but physiologically the natural salt is more acceptable.

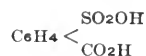
2. "What is an imide in organic chemistry? How can saccharin be termed both an imide and an amine?"

Amines are ammonia in which one, two or three hydrogen atoms have been replaced by alkyl groups, as methylamine, NH_2CH_3 , dimethylamine, $\text{NH}(\text{CH}_3)_2$, or trimethylamine, $\text{N}(\text{CH}_3)_3$. Amides are acids in which the OH group of the carboxyl has been replaced

by the amido (NH_2) group, acetamide, CH_3CONH_2 . (From *Pharmaceutical Chemistry* by Stanislaus and Kimberly.) The NH group of dimethylamine, or the secondary amine is known as the imide or imido group. The formula of saccharin is:



This is an amido compound in which the OH of the carboxyl radical has been replaced by an amido group. It is not an amine because the hydrogen of the ammonia has not been replaced by an alkyl group. Nor can it be called an imide because that term implies an NH group in combination with an alkyl radical. In saccharin the NH group is not combined with an alkyl. Saccharin is an amide-anhydride or benzoic sulphinide. It is made from ortho-sulpho-benzoic acid.



3. "On a prescription calling for 'neutral mixture' I dispensed liquor potassii citratis, U. S. P. Was that proper? The patient called for refills several times, which would indicate that I had dispensed the right thing. The doctor lived too far away to be consulted."

"Neutral mixture" is solution of potassium citrate. The prescription was filled correctly.

Removing Silver Nitrate Stains.

J. G. wants a method for removing a stain produced by silver nitrate and pyrogallic acid.

1. In the manipulation of the silver nitrate bath solutions in photography, the operator frequently receives stains of the salt upon his clothing. Stains or marks of any kind made with the silver or bath solutions may be promptly removed from the clothing by simply wetting the stain or mark with a solution of bichromate of mercury. The chemical result is the change of the black-looking nitrate of silver into chromate of silver,



DRUGGISTS ON AN OUTING.—Here we have the members of the Westchester County (N. Y.) Pharmaceutical Association at a meeting held some weeks ago at Rye Beach. They look as if they were enjoying themselves!

which is whiter, or invisible on the cloth. Bichromate of mercury can be obtained at the drug stores.

2. Apply this mixture: Sodium sulphite, 1 ounce; chloride of lime, $\frac{1}{2}$ ounce; water, 2 ounces. Mix. Use a nail-brush.

3. Dip the fingers into a strong solution of cupric chloride. In about a minute the silver will be converted into a chloride, and may then be washed off with sodium hyposulphite solution.

4. Bichloride of mercury, 5 grammes; ammonium chloride, 5 grammes; distilled water, 40 grammes. Apply the mixture to the spots with a cloth, then rub. This removes, almost instantaneously, even ancient stains on linen, cotton, or wool. Skin stains, thus treated, become whitish-yellow, and soon disappear.

A Rheumatic Formula.

E. C. M. submits the following recipe for a rheumatic preparation:

Fluidextract of colchicum seed...2 fluidrachms.
Potassium iodide.....6 drachms.
Sodium salicylate.....1 $\frac{1}{3}$ ounces.
Oil of gaultheria.....1 $\frac{1}{2}$ fluidrachms.
Alcohol sufficient to cut the oil.
Fluidextract of cimicifuga.....6 fluidrachms.
Potassium acetate.....1 $\frac{1}{3}$ ounces.
Tincture of hyoscyamus.....2 $\frac{2}{3}$ fluidounces.
Syrup of sarsaparilla compound enough to make
1 gallon.

Let the mixture stand a few days and filter.

The querist requests us to criticize the formula as to ingredients and quantities used. He says further: "I would like particular advice as to the vehicle of syrup sarsaparilla compound. Would you advise a cheaper vehicle than this? Would you consider root-beer extract any value in the above preparation? Would you sell it locally in 4- or 8-ounce bottles? Which would you consider the more popular—a 4-ounce package sold for 50 cents or an 8-ounce package for 75 cents or \$1.00?"

We don't feel competent as pharmacists to give advice on the therapeutics of a rheumatic formula. But this much is certain. We should advise the omission of the narcotic hyoscyamus in a preparation that is intended for popular sale over the counter. You had better leave it out. Syrup of sarsaparilla compound is undoubtedly a better alternative base than root-beer extract would be. The latter has no medicinal properties. The value of cimicifuga is questionable. It does no harm, but on the other hand we are not sure that it does any good. We are inclined to believe that the cimicifuga can be omitted without detracting from the value of the medicine. The size of the package must be determined by the character of the locality in which it is sold. While we are not acquainted with the vicinity of your store, in a general way we should be inclined to favor the sale of a 6- or 8-ounce mixture for 65 or 75 cents a bottle.

The Percentage Composition of Solution of Ferric Chloride.

J. K. writes: "Kindly explain why the Pharmacopœia says solution of ferric chloride should contain not less than 29 per cent of anhydrous salt corresponding to 10 per cent metallic iron. How do you find that the preparation contains 29 per cent of an-

hydrous ferric chloride corresponding to 10 per cent metallic iron?"

To answer the last part of the query first, the following equation shows that 29 per cent of ferric chloride contains 10 per cent of metallic iron. The molecular weight of the salt is to the atomic weight of the metal as 29 is to X. Or $161.04 \div 55.5 = 29 \div X$. $X = 10$.

To determine the percentage of ferric chloride in the solution, the molecular weight of ferric chloride is to the atomic weight of iron as X is to 125 (125 being the amount of iron in 1000 grammes of U. S. P. solution). Or $161.04 \div 55.5 = X \div 125$. $X = 362.7$ or 36.27 per cent metallic iron. But the disparity between our figure 36.27 and 29, the latter being that given in the Pharmacopœia, is to be explained by the fact that some of the iron does not go into solution because insufficient hydrochloric acid is used. The iron is in excess. After pouring on 420 grammes of HCl (only 133.98 grammes of absolute acid) on the 125 grammes of iron, the solution is boiled and filtered. In this first step ferrous chloride is formed as follows: $\text{Fe}_2 + 4\text{HCl} = 2\text{FeCl}_2 + 4\text{H}$.

Good Formulas for Making Cold Cream.

W. E. Q. writes: "Please give me a good formula for cold cream, white and fine-grained. I want something that will stand a summer temperature of 100° to 110° Fahrenheit."

Here is a simple but elegant preparation contributed to the BULLETIN by H. B. Molyneaux, of Omaha, Nebraska:

Paraffin250 grammes.
White wax.....260 grammes.
White paraffin oil or liquid
 albolene.....990 grammes.
Sodium perborate.....10 grammes.
Distilled water.....380 grammes.
Perfume, q. s. to suit.

Melt the paraffin and wax at the lowest possible temperature, and then add the paraffin oil. If this addition causes the wax to congeal, continue the heat while stirring sufficiently to remelt the mass. Now add the sodium perborate to the water and slightly warm the solution. Then add this to the wax solution in a continuous stream as large as a finger; at the same time briskly beat the emulsion with a wooden paddle until it becomes smooth. While the mass is in a semifluid state, incorporate the perfume. Then run the cream into the containers.

Pouring the cream into the jars while in the melted state gives the surface a glossy, satin finish on cooling. Don't fill the containers so full that the cover comes in contact with the top of the cream. For a perfume use oil of rose or a synthetic violet like "irol synfleur."

Val. Schmidt, of San Francisco, has found the following formula perfectly satisfactory:

White wax, spermaceti, of each $5\frac{1}{2}$ ounces; Russian mineral oil, pure white, 30 ounces, troy; distilled water, 12 fluidounces; pure borax, $2\frac{1}{2}$ drachms; otto of roses, 30 drops.

Melt the wax and spermaceti over a slow fire in a large porcelain evaporating dish; tare, and weigh the oil into it; then apply a gentle heat until clear. Dissolve the borax in the distilled water, previously heated to 150° F.; allow the wax, spermaceti, and oil to cool to about the same temperature; add the solution of borax *all at once* and stir briskly for a few minutes, then add the otto of roses, continuing the stirring until cool.

When thus prepared the product is a snow-white, elastic, creamy-looking ointment, which will keep almost indefinitely. This cream may be poured into suitable containers while still quite warm without impairing its texture.

A Kidney and Liver Remedy.

E. C. M. submits the following preparation for criticism:

Powdered buchu leaves, short.....	12 ounces.
Powdered dandelion root.....	12 ounces.
Powdered juniper berries.....	8 ounces.
Cut pareira brava.....	8 ounces.
Cut stone-root.....	8 ounces.
Potassium acetate.....	12 ounces.
Cut mandrake.....	4 ounces.
Syrup of gaultheria.....	16 ounces.
Alcohol	2 pints.
Water, sufficient to make.....	1 gallon.

Macerate twenty-four hours; filter to 7 pints. Add syrup to make a gallon. Let the preparation stand a few days and filter.

The querist goes on to request that we criticize the formula as to ingredients and their quantities. He also asks: "Is gaultheria sufficient for an aromatic? Would it be advisable to charge 75 cents or \$1.00 for an 8-ounce bottle? Would you favor putting up a 4-ounce bottle for 50 cents? How would you improve the formula?"

We are not medical experts and are hardly in position to give advice on the therapeutic value of the foregoing formula. But we see no objectionable ingredients in the mixture. It is a question whether there is enough mandrake in the preparation to do any good. As for the flavoring agent we advise the use of the spirit or oil of gaultheria. The syrup of gaultheria is hardly sufficient to impart the desired flavor to the mixture. The size of the bottle to be dispensed will depend entirely on the character of the locality in which it is to be sold. It is questionable whether you could sell much of the preparation for \$1.00. We should be inclined to favor putting up an 8-ounce package for 65 or 75 cents. Fifty cents a bottle is a little too cheap, and a dollar in many instances a little too dear, so that it might be well to strike a price midway between the two.

Unavoidable Discoloration.

R. B. C. submits the following prescriptions. He has had trouble with them and does not think that they can be filled successfully:

Codeine sulphate.....	5 grains.
Caffeine citrate.....	20 grains.
Ammonium iodide.....	20 grains.
Bismuth subnitrate.....	100 grains.

Mix and make 20 capsules.

Codeine sulphate.....	5 grains.
Caffeine citrate.....	20 grains.
Ammonium bromide.....	20 grains.
Bismuth subnitrate.....	100 grains.

Mix and make 20 capsules.

These two powders become discolored owing to the presence of bismuth subnitrate, ammonium iodide, and citric acid. The discoloration cannot be avoided.

Pills Too Big to Go Down!

P. D. C. received the following prescription to be dispensed in pill form. The querist did his best, but the pill was too large to be swallowed:

Salol	1½ drachms.
Oil of cubeb.....	2½ fluidrachms.
Balsam of copaiba.....	3 drachms.
Santal oil.....	1 fluidrachm.

Mix and make 30 pills.

This is a difficult mixture to form into a pill mass since three of the ingredients are liquid. Oleoresin of cubeb and santal oil would soften the salol, which

is the only solid ingredient. Balsam of copabia is soft in consistency. The medication is approximately 14 grains in each pill. To take up the oil in making a pill mass, it would be necessary to use at least 25 per cent of calcined magnesia with water and acacia sufficient to make a mass. The mixture would then have to be seasoned to allow the magnesia to react. This process would produce a pill weighing 22 or 23 grains, and such a pill could not be easily swallowed. We suggest dispensing the mixture in a capsule rather than in pill form. As we have already indicated, this is a bad formula. It consists almost entirely of oils. Salol is softened by oils and practically forms a liquid with them, especially if friction be used.

An Incompatible Mixture.

E. P. C. requests us to comment on the following prescription:

Gold and sodium chloride.....	12 grains.
Ammonium chloride.....	7 grains.
Strychnine sulphate.....	1 grain.
Fluidextract of cinchona.....	3 ounces.
Fluidextract of coca.....	1 ounce.
Glycerin	1 ounce.
Water	1 ounce.

Two drachms in water after meals.

Ruddiman in his book on incompatibilities says that gold and sodium chloride precipitates strychnine sulphate and the alkaloids in cinchona. We do not think that the glycerin would prevent the precipitation. By dissolving the gold and sodium chloride in water and adding an equal weight of sodium thiosulphate a compound is formed that does not precipitate the alkaloids from this mixture. The gold might be reduced on standing for some time. The alkaloids of coca might also be precipitated by the gold chloride.

An Astringent Mouth-wash.

L. J. M. wants an astringent mouth-wash containing zinc chloride, menthol, eucalyptol, etc. He might try this:

Zinc chloride.....	4 grains.
Menthol.....	2 grains.
Eucalyptol.....	1 minim.
Oil of peppermint.....	3 minims.
Oil of cassia.....	20 minims.
Alcohol.....	120 minims.
Water, enough to make.....	8 ounces.

This could be colored with 30 minims of a solution comprising 5 grains of Eaton's "Cherry Red" in one ounce of hot water.

Place the oils on a small piece of cotton in a funnel and pass the water through. To the resulting solution add the zinc chloride. Dissolve the menthol and the eucalyptol in alcohol, add to the solution, mix well, pour in the color, and filter after standing for two days.

Franzbranntwein.

J. F. writes: "Will you kindly publish a formula for Franzbranntwein?"

Franzbranntwein is a German synonym for brandy. In the United States and British Pharmacopœias brandy is called Spiritus vini Gallici. It is also known as Spirit of French Wine; in France it is called Cognac or Eau de Vie. In Germany it is known as Brantwein or Franzbranntwein. For further information see the Dispensatory.

An Effervescent Salt that Does not Effervesce.

A. J. R. writes: "The following mixture is prescribed frequently by a local physician:

Magnesium sulphate.....	1 1/2 drachms.
Sodium and potassium tartrate.....	40 grains.
Tartaric acid.....	20 grains.

"The patient is instructed to take one powder in a glass of water and drink while effervescing. But the salt does not effervesce."

There is no carbonate in the mixture to furnish the carbon dioxide. Furthermore, the formula is not practical for the reason that when sodium and potassium tartrate salt is mixed with tartaric acid, it will throw down a precipitate of insoluble potassium tartrate. Suppose you try the following modification, having first consulted the physician:

Magnesium sulphate, dried and powdered.....	72 grains.
Potassium and sodium tartrate.....	40 grains.
Tartaric acid.....	30 grains.
Powdered sodium bicarbonate.....	40 grains.

Dry all ingredients thoroughly before mixing.

Linseed Oil Soap.

I. E. T.—A linseed oil soap is given in the Pharmacopœia in the official Sapo Mollis or Green Soap. Another formula is as follows:

Linseed oil.....	10 ounces av.
Potassium hydroxide.....	2 ounces av.
Alcohol.....	9 1/4 fluidrachms.
Water.....	sufficient.

Dissolve the potassa in enough water to make 11 1/2 fluid-ounces of solution. Warm the oil in a porcelain capsule, and to it gradually add the alkaline liquid previously mixed with the alcohol. Heat the mixture on a water-bath until saponification is completed.

Just how well these formulas will serve for cleaning automobiles we are unable to say. If the soap is too soft, it can be hardened by adding stearic acid and also by replacing the potassium hydroxide with sodium hydroxide.

Camphorated Chalk.

W. A. L.—This is a refreshing and harmless dentifrice. It should be kept in well-stoppered containers to avoid loss of camphor by evaporation. Several formulas have been given for it, varying in the proportion of the ingredients. The following are used:

- (1) Camphor 1 ounce av.
Precipitated chalk..... 9 ounces av.

Triturate the camphor to powder with a small quantity of alcohol, gradually incorporate the chalk, and pass through a fine sieve.

- (2) Precipitated chalk..... 9 ounces av.
Orris root, powdered..... 2 ounces av.
Camphor 1 ounce av.

Prepare like the preceding formula.

A Veterinary Prescription.

E. D. D. has received the following prescription from a veterinarian and wishes to know how to compound it:

Powdered opium.....	10 grains.
Iron sulphate.....	100 grains.
Iodine crystals.....	6 grains.

Mix and make 20 pills.

Dry the iron sulphate, add the opium, and make a pill mass with glucose. Dissolve the iodine in alcohol before adding to the rest of the formula. Divide the mass into 20 pills. If the pills are not coated, dispense in capsules to avoid the loss of iodine, which might volatilize to some extent.

Foot Powder.

A. J. writes: "Please publish a good formula for foot powder, also one that can be put up in tablet form."

Try this:

Alum	1 ounce av.
Boric acid.....	2 ounces av.
Talcum	4 ounces av.
Starch	6 ounces av.
Oil of lavender flowers.....	15 drops.

Reduce all to fine powder, mix well, and pass through a fine sieve. If a soluble tablet is desired, replace the talc with milk sugar, granulate, and make the tablets by machine.

Artificial Culture of Golden-seal.

L. J. P. and Others.—The Bureau of Plant Industry of the Department of Agriculture in Washington will furnish you a booklet on the artificial cultivation of golden-seal. The government authorities are doing all they can to foster the growing of this drug.

Decolorizing Carbolic Acid.

W. C. A. wants a process for decolorizing reddened phenol.

A good method is to add alcohol to the phenol and then cool the mixture to a low temperature. The phenol will crystallize out in a colorless condition, and the colored alcohol may then be rejected.

A Remedy for Worms in Hogs.

C. D. E. writes: "I am in need of a good remedy for the treatment of worms in hogs. How much santonin and calomel should be given?"

For an adult hog give

Santonin	15 grains.
Calomel	5 grains.

Repeat if necessary.

Removing Silver Nitrate Spots from Marble or Porcelain.

D. & F. have stained their white enamel or porcelain lavatory with silver nitrate. Having tried sulphuric acid and other things without success, they ask our advice.

Try painting the spots with a solution of chlorinated potassa, wash with water, and then apply a concentrated solution of sodium hyposulphite. This process is used to remove silver nitrate stains from marble.

Glycerin, Benzoin and Rose-water.

W. A. S.—We have published several methods of making this familiar lotion. We refer you to the BULLETIN, October, 1907, page 427; July, 1908, page 297; December, 1908, page 516; and February, 1908, page 71. Two methods of dispensing this mixture are also given in our book entitled "350 Dollar Ideas for Druggists."

Shampoos.

F. S. B.—A good formula for a liquid shampoo will be found elsewhere in this issue in the Department of Practical Pharmacy. Also consult our annual indexes in the December numbers. Two formulas appeared on page 525 of the December BULLETIN for 1910.

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THE MONTH'S HISTORY

THE PHONE BOOTH A MONEY-MAKER.

Telephone conditions in Philadelphia seem to be very gratifying, and they well illustrate what can be done when the druggists of a city grapple with the telephone situation in earnest. When the telephone companies are first urged to install slot 'phones in drug stores, they are likely to be indifferent, but it almost invariably follows that in time they become quite as enthusiastic as the druggists themselves if the scheme is once adopted. Thus we find the Bell Company in Philadelphia now endeavoring to propagate the slot 'phone idea and to induce druggists to increase their business.

At a recent meeting of the P. A. R. D., David J. Reese, chairman of the Telephone Committee, submitted a letter which he had

received from the Bell Company. From this it appears that there are 810 Philadelphia drug stores in which pay stations are located. In 480 cases the druggists receive a commission of 33 1/3 per cent. In the remaining 330 cases the commission is only 25 per cent because the daily receipts are less than 50 cents. The Bell Company is anxious to have the latter group of 330 druggists so increase their business that they will be earning 33 1/3 per cent commission. In order to do this they would be required to reach receipts of \$180 a year.

At present their average is \$140 per annum, and their total yearly commission is \$21.50. If they would increase their business to \$180.00 per annum, and thus enlarge their receipts only to the extent of \$40.00, their commission would jump from \$20.50 to \$42.00. In other words, it would be doubled, and they would be earning 50 per cent on this additional \$40.00 of business! Furthermore, of these 330 druggists, there are more than a hundred whose yearly business runs from \$160.00 to \$179.00, and who now receive an average commission of \$26.50 per annum. It would only take a slight increase in receipts to reach the \$180.00 figure, in which event their commission would jump from \$26.50 to \$42.00. These men would earn about 100 per cent on the additional business they did up to \$180.00 a year!

The Bell Company is very anxious to have all of the druggists in Philadelphia so develop their telephone receipts that they will be placed in this way under the 33 1/3 per cent commission. How can this increase in business be effected? The company believes that the best and the simplest method lies in the use of booths. In ten cases where booths were installed to succeed open instruments, the monthly receipts jumped from \$15.00 to \$24.00, from \$29.00 to \$52.00, \$46.00 to \$94.00, \$26.00 to \$40.00, \$19.00 to \$39.00, \$25.00 to \$46.00, \$12.00 to \$22.00, \$105.00 to \$175.00, \$65.00 to \$140.00 and \$24.00 to \$52.00. In ten other cases, where window booths with the

proper signs had been installed, the increased business was still more surprising.

All of which illustrates that the telephone booth certainly helps the telephone business very materially. Another lesson to be drawn from these facts is this, that many druggists, with a little thought, could so increase their telephone receipts as to get a larger commission and thus considerably develop their earnings.

* * *

MORE DRUG EXAMINATIONS IN NEW YORK.

The sensation developed by the *New York World* a few months ago has died out, but in the meantime we find that the city board of health is beginning what seems to be a systematic inspection of drug stores. It has asked for a special fund for the purpose of making a drug investigation. So far 60 specimens out of 400 have been declared to be below standard, and 46 of these consisted of magnesium citrate containing in some instances a mere trace of tartrates.

The New York Retail Druggists' Association seems quite indignant, and it has been discussing ways and means of protection against the aggressions of the board of health. Some of the members have even suggested that redress might be found in legislation! It seems to us that about the best defense would be to carry nothing but good drugs—and then tell the board of health to do its worst! Fortunately the 60 instances of dereliction already discovered by the board are unimportant in character—that is to say, the variations from the standard have been very slight and insignificant.

Druggists may just as well realize that from now on, and practically all over the country sooner or later, they will be under more or less strict surveillance. We are entering more and more as a country upon an era of pure food and drug reform. The only wise thing to do is to read the handwriting on the wall—and then obey it!

* * *

SOME SHORTCOMINGS.

Charles M. Ford, drug inspector for the State of Colorado, pointed out to the druggists of Denver some of their shortcomings at a recent meeting of the local association. Explaining that Castile soap is a phar-

macopœial term, he declared that any article bearing this name which is not a compound of olive oil and soda may not be legally sold in the State. He spoke particularly of one brand of Castile soap which is largely sold, but which is made from cocoanut oil, and is therefore unsalable under the name of Castile soap.

He reported that in most of the drug stores of Denver the only calcined magnesia carried in stock is that made "for technical purposes." This substance is evidently being employed for the preparation of solution of magnesium citrate and for other medicinal purposes. Mr. Ford declared that such a condition of things was reprehensible, and that technical magnesia contained such impurities as aluminum, calcium, zinc, and other bases, and was therefore unfit for drug-store use.

Somewhat surprising was his statement, too, that Seidlitz powders were often inaccurately or carelessly weighed. He said he had examined a box of Seidlitz powders made by the A. D. S. and found the contents of the blue papers weighing from 9.6 grammes to 9.8 grammes, whereas they should have weighed exactly 10.33 grammes. The white papers, on the other hand, weighed from 1.94 grammes to 2.29 grammes. They should have weighed 2.25 grammes precisely. Mr. Ford explained that if the acid and alkali in Seidlitz powders are not accurately weighed so as to produce a perfect chemical reaction, the medicine is unpalatable and inefficient.

* * *

REGARDING THE VENDER.

Apparently the chief feature of the recent "get-together meeting" in Cincinnati was an address by Prof. George B. Kauffman, the well-known dean of the School of Pharmacy of Ohio State University, on the itinerant medicine vender. Professor Kauffman availed himself of this opportunity to ask for the support of the medical profession in legislative attempts to curb the operations of venders. A vigorous effort was made last year to put a bill through the Ohio legislature, and Judge Errant even went from Chicago to present an argument at the hearing granted by a legislative committee. The bill failed, however, and another effort will be made during the coming winter. In the meantime such physicians as were present at the get-together meeting agreed to give their coöperation, and it seems likely

that the assistance of the State Medical Society will also be solicited.

In this connection it is interesting to report that Frank C. Ullrich, who has for years been chief organizer of the N. A. R. D., and who has therefore been living very close to this subject, has recently expressed his conviction that the itinerant vender cannot be driven out by means of legislation. It has been his experience that the customary type of law, requiring an annual fee of \$100, \$200 or more, simply spurs the vender on to increase his sales, which reacts in making still greater inroads on the business of druggists and other retail merchants. Mr. Ullrich believes that the only hope, so far as legislation is concerned, is to enact laws which entirely prohibit the vender from doing business at all—and such laws are of course not constitutional.

His idea is that the only solution of the problem lies in competition, and we are reminded at this point of an article appearing somewhere in one of the journals during the last few months in which it was described how all the druggists in a given county combined, purchased a horse and wagon, employed a man, and started in the itinerant vending business themselves in direct competition with the man who previously had been covering the territory.

Mr. Ullrich, by the way, has retired from the service of the N. A. R. D. and has become sales manager of a firm in Wisconsin.

* * *

THE REXALLITES.

The United Drug Co., comprising the Rexall group of druggists, was able to report considerable progress at the annual meeting held in Boston recently. President Liggett announced that there were now 4500 stockholders as compared to 3600 a year ago. The company did a business last year of \$2,839,328.91, while the sales of the several subsidiary concerns brought the total volume up to \$6,800,000. The auxiliary or side-line features, indeed, seem to assume more prominence than the manufacture of medicinal specialties, for we find that at the annual meeting it was voted to acquire a paper manufacturing plant near Springfield, Mass., and a rubber manufacturing plant in Ohio. The Liggett candy business, too, seems to be developing quite rapidly.

It was decided at the meeting to organize a drug jobbing company in Boston with a chain of branches throughout the country, while so far as the ownership of retail stores is concerned, it was shown that there are now four in Baltimore, two in Columbus, two in Detroit, two in Toronto, five in Buffalo, two in Syracuse, and 17 in New England. To this retail group will soon be added a store in Boston and another in New York. President Liggett says that he intends to make the former "the finest retail drug store in the United States." The latter will be established at the corner of 34th Street and Broadway, and a rental will be paid of \$110,000 a year! Mr. Liggett thought that even if this step would involve a loss of \$50,000 annually it would still be a good advertisement for the company.

* * *

SOOTHING SYRUP SAMPLES.

The local association of druggists in Cincinnati has brought to itself quite a little fame by refusing to distribute samples of soothing syrups. A law was enacted by the State legislature last year making it illegal to distribute samples of medicine from house to house. Since then manufacturers have been endeavoring to get the druggists to make their distributions for them. So far as samples of soothing syrups are concerned, the association discussed the matter at one of its meetings and finally voted unanimously to refuse absolutely to sanction the practice. It was declared that soothing syrups containing narcotic drugs were invariably harmful, and that no member of the association should think for a minute of passing them out to the public. The *Cincinnati Times-Star* subsequently published an editorial commending the druggists for their stand, and more or less was said about it for some time in the other papers.

* * *

AFTER PATENT MEDICINES IN CANADA.

The druggists of the Province of Ontario, Canada, have recently discovered the existence of a somewhat peculiar law affecting the patent medicine industry. It is in the form of an amendment to, or a provision in, the liquor license act, which perhaps explains why it has escaped detection. As a matter of fact, however, it has very little if any connection with the liquor business, but is in effect a

restriction upon patent medicines and druggists' specialties. In a word, this law provides that any medicinal preparation not in the British Pharmacopœia or other recognized standard must, if it contains more than 2½ per cent of alcohol, either have the formula plainly printed upon the container or else deposited in the office of the Provincial Secretary in Toronto. Furthermore, if any preparation is found to contain more alcohol than is required for purposes of solution or preservation, it shall be deemed in violation of the liquor act. The penalties are of course those prescribed for violation of the liquor act, and it would seem that the pharmacists of Ontario are afraid that the provincial authorities are getting ready to see that the law is enforced.

* * *

CLERKS HUNTING FOR A NAME.

The friends of the "National Association of Pharmacologists" will be glad to know that this organization has decided to change its name. The title has never been characteristic of a society of clerks, and the boys have always lost the advertising benefit flowing from the use of an apposite name. The association now asks all of its friends to suggest titles. But why strain for effect? What's the matter with a plain, simple, well-understood name like "The National Association of Drug Clerks?" Everybody will know at once what this means, and isn't that what a name is for? We have a National Association of Retail Druggists. We have a National Wholesale Druggists' Association. Now let us go a step farther and have a National Association of Drug Clerks or a National Drug Clerks' Association. Either will do—and we make no charge for the suggestion.

* * *

FOOD AND DRUG EXAMINATIONS.

It would seem that, despite the recent friction in the Department of Agriculture at Washington, the food and drugs act has been administered with a good deal of thoroughness during the last year. On the tenth of last month a press notice was issued from the office of the secretary showing that the inspection force of the Bureau of Chemistry had collected 9500 official samples of foods and drugs during the year, of which 3280 interstate samples were found to be legal, and 3113 misbranded or adulterated, while 503

check analyses were made to insure that correct results were obtained before recommending action on the samples. In connection with this work 5370 hearings were held, less than half being by correspondence. There were 96,129 floor inspections made of imported products, of which over half were made at New York. A total of 9698 imported foods and drugs were analyzed at these ports, of which number 3085 were adjudged adulterated or misbranded, and 1268 were released without prejudice to future shipments. The miscellaneous samples examined at the branches aggregated 1406, making a total of 18,000 samples.

* * *

Dr. James H. Beal, in order to devote himself to his new position as general secretary of the A. Ph. A., and editor of the official organ, has retired from the chair of theory and practice of pharmacy in the Pittsburg College. Louis Sallbach, already a member of the faculty, has taken over Professor Beal's work.

* * *

After nearly a year of agitation, all but the down-town druggists in Louisville have agreed to close at 9 o'clock every evening in the week save Saturday, during the remainder of the winter. The closing hour on Saturday nights will be 10 or 10.30 o'clock.

* * *

The winter meeting of the American Chemical Society will be held in Washington, D. C., from December 27 to 30. The Division of Pharmaceutical Chemistry will hold several sessions and an interesting programme will be presented.

* * *

The Philadelphia Association of Retail Druggists has petitioned the incoming city administration to have pharmacy represented in the personnel of the Department of Health and Charities.

* * *

The Boston correspondent of *N. A. R. D. Notes*, in speaking of certain practices, says they have "achieved a foothold in the minds of physicians." Think of that from Boston, of all places!

* * *

There have been several convictions lately for the manufacture and sale of hydrogen peroxide of a strength below the standard. In some instances the product has been little else than water.

EDITORIAL

PRICE-PROTECTION: A BIG QUESTION.

About the time this issue of the BULLETIN is being mailed the Executive Committee of the N. A. R. D. will be gathering in Chicago for the purpose primarily of deciding upon some form of price-protection which will stand the test of the courts. Careful thought upon this subject during the last few months has brought us to the conviction that, to say the very least, the Committee is facing a problem of great difficulty, even if it is not one which defies solution altogether under the present laws of the country.

The recent decisions of the Supreme Court, supplemented by still later decisions in the lower Federal courts in the bath-tub and General Electric cases, and supplemented also by the now famous Detroit speech of President Taft, make it clear at last that the Sherman act is the very symbol and guardian of free, unrestricted, and untrammelled competition in trade. The act is based upon the old common-law doctrine, and as well upon the time-honored economic doctrine, that the prices which result from the unfettered trafficking of the market place, one competitor underbidding another, and still others underbidding the second until the very lowest point has been reached, are the prices to which the public is entitled; that all unfair and monopolistic profit has thus been automatically prevented; that the consumer gets the full benefit of every progressive cheapening in the cost of production; and that the dealer who by any device whatsoever interferes with the action and interaction of this free bargaining is therefore subverting natural law for his own benefit at the expense of the public welfare.

This, we repeat, is now seen to be the very genius of the Sherman act. There must be no restraint of any sort upon trade. There must be no restraint of any sort upon prices.

Now, then, what leg is left for the drug trade to stand upon in its very laudable desire to frame a price-restrictive plan which will stand the test of validity? Well, Mr. Free-ricks, in an admirable paper contributed to these pages last month at our request, argued

with some show of plausibility that the problem can be solved by indirection. The Freeman-Miles plan, technically called the agency-assignment method, is apparently his remedy. By this device, he explains, the manufacturer retains the ownership of his goods until they reach the consumer. When the dealer, who is merely his agent, sells them at retail, it is therefore he, the manufacturer, who is technically making the sale. And since the manufacturer has the undisputed right, when acting alone and by himself, to sell his goods under any conditions he may elect, he is accordingly violating no law when he refuses to dispose of them except at his own price.

In the interests of the N. A. R. D., and of the drug trade as a whole, we hope this reasoning will hold water, but we fear it will not. To us (and we confess it with real regret) the agency-assignment scheme seems merely a subterfuge, and the Supreme Court in express language declared in the Tobacco Trust decision that:

In view of the general language of the statute, and of the public policy which it manifested, there was no possibility of frustrating that policy by resorting to any disguise or subterfuge of form, since resort to reason rendered it impossible to escape by any indirection the prohibitions of the statute.

Language conveying practically the same message was also contained in the Miles decision. It is true that Justice Holmes dissented from this view, with particular reference to the Miles case, and held that a true agency agreement would render the old Miles plan invulnerable, but his confrères on the Supreme bench apparently did not agree with him.

A court always burrows down beneath the externalities of a situation and searches out the underlying *motive* and *purpose*. Supposing the new Miles plan were to come up for judgment, would not the Supreme Court hold that the *purpose* was the same as in the old plan declared illegal, and that only the *form* had been changed. If there were unfair restriction of price before, was not the same restriction still in evidence? If public policy were injured in the first instance, was it not still suffering the same injury? Was not the essential principle of the Sherman act still violated and ignored?

Now in this free expression of our doubts it must not be assumed that we are defending the Sherman law and are consequently inveighing against any effort to secure price-protection. On the contrary, indeed, we are out of sympathy with the law entirely, and we bitterly regret that it seems to stand like a stone wall in the way of any substantial progress toward price-reform. It is not only the drug trade, however, that is crippled and hampered by the operation of the act. We are simply caught up in the meshes of a situation which affects the industrial life and progress of the entire nation. We are merely playing our small part in a great drama which is destined to occupy the center of the stage for a generation to come, and which will furnish the chief issue for political parties to struggle over in many a campaign.

The Sherman act, and the old economic doctrine upon which it was based, are no longer suited to modern conditions and must sooner or later give way to something radically different. Law is simply the reflection of human progress and should keep pace with it as it advances. The era of fierce, bitter, unrestrained competition has in effect been followed in all the larger industries by an era of coöperation and combination. The benefits have been great, but there have been evils also. Because of these evils there are those who would wipe out the new era and thrust us back 25 years into the old, and this is practically the effect produced by the recent decisions of the Supreme Court. A wiser course, and one more in harmony with the evolution of human progress, would be to retain the new era but to eliminate its evils. It is not necessary to burn the house in order to get rid of the rats. There is much force in the declaration of George W. Perkins that we must keep our modern combinations, but, following the governmental method of supervising the banks and the railroads, we must so regulate them as to protect the public at every step. Regulated combination is far more economical than unregulated competition.

This, then, is really the issue: Shall we go forward as a country into a larger measure of beneficial coöperation, or shall we flout progress and go backward to all the evils and the costs and the enormous wastes and disasters of cut-throat competition? Shall we retain

the Sherman law as a relic of the former period, or shall we substitute for it laws recognizing combinations but penalizing acts of aggression and injustice?

When this question is answered, as it will be with more or less certainty within the next 20 years, the drug trade will know definitely just what it may do in the fair and just restriction of prices. In the meantime, however, it may not be necessary to fold our hands and wait calmly for time and tide to come to our rescue. Perhaps the soundest position for the N. A. R. D. to take in this transition period is that suggested by Mr. Freericks (suggested at least by intimation if not more directly), that a test case of the agency-agreement plan of restricting prices be made as soon as possible in order that we may know positively whether or not it is permissible under present conditions. It is possible that it may not be in conflict with the Sherman law, and it is wise not to give up until we know we've got to.

ROBBING TYPHOID FEVER OF ITS TERRORS.

The startling discoveries in applied medicine are made nowadays in the field of biologic research. Chemistry occasionally continues to furnish something noteworthy, as in the recent advent of Salvarsan, but it remains true that most of the marvelous additions to the *materia medica* of late years have been biological in nature. This is where future progress seems very largely to lie.

Take the recent production of typhoid vaccine, for instance. Here we have a disease which has proved one of the most serious scourges of humanity. Everybody recalls that in the Spanish-American war twelve or fifteen years ago there were far more deaths from typhoid fever than from bullets! Every time there is an epidemic in a town, the grim reaper gets in his work with a vengeance, and the country still remembers the frightful situation at Cornell University a few years ago.

It is a little early yet to predict definite results, but already it would appear that typhoid vaccine almost entirely does away with the disease when used as a prophylactic or preventive. As a curative it has not been conclusively shown to possess value, but when

employed as an immunizing agent, its disease-protecting character is little less than astonishing.

So far most of the experiments have been conducted upon the armies of various countries. The statistics are enormous in extent, but it may not prove uninteresting to mention just a few figures. Thus Major H. J. Buist, of the Medical Corps of the British Army, submits a report touching upon 4884 men living under exactly the same conditions. Among those vaccinated there occurred 2.66 cases of typhoid per thousand; among those not vaccinated the incidence of the disease amounted to 6.48 per thousand. Leishman, giving another and more gratifying set of figures in the *Journal of the Royal Army Medical Corps*, asserts that of 6610 men not vaccinated, there were 187 cases of the disease and 26 deaths. Of 5473 men who were vaccinated (an almost equal number), there were 21 cases of the disease and two deaths.

It is abundantly shown by all the statistics, moreover, that not only does vaccination greatly reduce the number of victims, but it also reduces the virulence of the disease. In other words, if a man does happen to get typhoid after he has been vaccinated, the attack will be much lighter in character, and the chances of recovery will be something like 4 to 1 as compared with unvaccinated victims.

The vaccine was first used in the Boer war from 1899 to 1902. Later on it was employed among the German South African troops from 1904 to 1906. Since then it has been experimented with extensively in the British armies. Comparing these three sets of statistics, it has been discovered that with soldiers exposed to exactly the same conditions, the percentage of typhoid fever in the inoculated was reduced to about one-half in the Boer and German campaigns, and later on to about one-seventh in the British experiments. Furthermore, as we have already indicated, the disease, when contracted by inoculated subjects, ran a much milder course, so that the total mortality rate for the inoculated was reduced in the Boer war to about one-third, in the German experience to about one-fourth, and in the more recent British experience to less than one-tenth. Later experiments carried out on a

vast scale in our army and elsewhere indicate that under conditions of peace, with vaccine and methods superior to those first employed, the use of typhoid vaccine may be expected to reduce morbidity at least six-sevenths and mortality nine-tenths! In other words, six men out of seven will be perfectly protected who would otherwise contract typhoid, and nine out of ten will be saved who would otherwise die.

Is this not a remarkable triumph over a disease against the attacks of which heretofore there has practically been no protection?

Typhoid vaccine is now available on the market, and druggists who deal in biological products will in the future need to carry it in stock if indeed they do not already have it. The vaccine is practically composed of the dead bacilli, first grown and then killed under certain careful conditions, and preserved through the use of trikresol. A rubber-stoppered glass bulb of the vaccine, for instance, contains 1000 million bacteria, sterile and ready for use. Think of it—one thousand million germs! And yet we have been made perfectly familiar with these stupendous numbers by the production of similar vaccines during the last few years. All of these bacterial vaccines are used on the theory that by injecting into the blood a relatively small number of the dead germs which in this condition are incapable of producing the disease, you stimulate the body to develop its native powers of resistance against that particular malady, and by increasing the amount gradually until several doses have been given, you develop this resistance to the maximum.*

Careful observers point out that not only should typhoid vaccine be used everywhere in navies and armies, but also in communities suffering from an epidemic, and in families where a case of the disease exists. In some instances a mild reaction follows the administration of the product, and its use is contraindicated with persons not in good health. Properly employed, however, the untoward results are insignificant, and many patients experience no ill effects whatever even of a transient nature.

*See editorial on "Bacterial Vaccines" in the BULLETIN OF PHARMACY, November, 1908, page 446.

THE HALL OF FAME

THE NEW MEMBER OF THE N. A. R. D. EXECUTIVE COMMITTEE.

The executive committee of the National Association of Retail Druggists selected at the Niagara Falls meeting was identical with that



J. ARTHUR BEAN.

of last year except that Charles F. Mann, positively refusing a reelection, was succeeded by J. Arthur Bean of Boston. "Bean of Boston"—this verbal connection furnishes a strong



Mr. Bean's store is in the first building at the right.

temptation to punning, but we courageously resist! Besides, there is nothing baked or half-baked about this Boston product. He is a fresh and energetic specimen of the East, and he has made a particular record in propaganda work. We are showing his portrait

this month, and we are also printing a photograph of the block in which Mr. Bean's pharmacy is located. As everybody knows, the members of the executive committee of the N. A. R. D. are now Charles H. Huhn, chairman, H. B. Guilford, Henry W. Merritt, J. Arthur Bean, A. E. Zuber, and E. H. Thiesing. H. C. Shuptrine, president of the N. A. R. D., and Thomas H. Potts, secretary, are of course *ex-officio* members of the executive committee also.

THE PRESIDENT OF THE W. O. N. A. R. D.

Mrs. Charles A. Storer, of Chicago, was elected president of the Women's Organization of the N. A. R. D. at the Niagara Falls meeting in September. She succeeds Mrs. W. E. Lee, who held the office for a number of years, and



MRS. C. A. STORER.

who is now secretary. Mrs. Storer has always been prominent in the work of the organization, and has been a leading figure from the first in the work of the Chicago branch.

SURPRISING MR. MEYER AT HOME.

A very pleasant incident developed at the office when Mr. Theo. F. Meyer, president of Meyer Brothers Drug Company, St. Louis, Missouri, returned from his recent Eastern trip, where he went to attend the meeting of the National Wholesale Druggists' Association. The employees of the house, desiring

to express their pleasure at the honor recently conferred upon their chief by the N. W. D. A. in electing him president of that organization, arranged for a demonstration upon his arrival at the office.

As Mr. Meyer is an early riser, and is usually at his desk long before the opening hour, it required no little diplomacy to so arrange matters as to keep him away from work until the time set, 8.15 A.M. Fred M. Odena, the genial and diplomatic representative of Parke, Davis & Co., of Detroit, Mich., who is a very warm personal friend of Mr. Meyer, happened to be in the city and very kindly accepted the task of keeping him away from the office until the appointed time.

At exactly 8.15 A.M., when Mr. Meyer entered the building, he was greeted with round after round of applause, and upon reaching his desk he found an immense bouquet of American Beauty roses fully six feet high, with the following legend on a wide silk ribbon or banner:

"Theo. F. Meyer, President N. W. D. A., 1911-1912. Congratulations of the employees."

The surprise was complete. Fortunately

for the loyalty of the force and the character of the man thus honored. The affair was strictly informal, and after the usual congratulations, business went on as if nothing unusual had happened.

A VICE-PRESIDENT OF THE N. A. R. D.

At the recent meeting of the N. A. R. D. in Niagara Falls S. A. Eckstein, head of the Wright Drug Co. of Milwaukee, was elected



S. A. ECKSTEIN.

third vice-president of the organization. In addition to that Mr. Eckstein is the president this year of the Wisconsin State Pharmaceutical Association. These two positions indicate the esteem in which Mr. Eckstein is held by his coworkers in the drug trade.



THEO. F. MEYER.

Mrs. Meyer, Miss Elizabeth Meyer, and Theo. Meyer, Jr., had all accompanied Mr. Meyer to the office, expecting to go automobiling afterwards.

A demonstration of such warmth, conveying the sentiments of the employees of a house, is seldom witnessed, and it speaks much

Sterilizing Morphine Solutions.—

A. Lesure says that in sterilizing solutions of morphine salts by heat, the morphine is partially oxidized and the solution thereby discolored. He recommends that for solutions which are to be kept in stock, the bottle be first rinsed with acidulated water, then filled completely with the solution, and then sterilized in an autoclave at 120° C. for twenty minutes.

Other Worlds and Ways.—

Professor Thomson says that the temperature of the sun is about 6000° C., of Mercury 194° C., of Venus 95° C., of the earth 17° C., and of Mars —38° C. The Martian temperature he suggests is bad for the canals. He calculates that the radiant energy given out by the sun is equal to about 15,000 horsepower per square foot.



Robert Clarkson, 213 South Sixth Street, Springfield, Ill., has a glittering, well-stocked, up-to-date establishment. Notice the Bangs tables in the center and the modern all-glass show cases on either side. Ladders run up to the wall cases between the top of the fixtures and the ceiling.



Bert Finney, Bismarck, N. D., is a member of the State Board of Pharmacy of North Dakota, and is known among the druggists of that region of the country as a hustler. Last year Mr. Finney was president of the State association. His pharmacy is illustrated in this view.



H. H. Cassles, of Canyon, Texas, who contributed a "Best Advertising Scheme" to the November BULLETIN, is the owner of this store. Mr. Cassles himself is the third figure from the left.



Here we have Mobb's "St. Louis Drug Store," at 370 Central Avenue, in the well-known health resort of Hot Springs, Arkansas. The picture was taken by one of the clerks, Frank C. Whitney.



The Co-operative Drug Co., 14 West Centre Street, Logan, Utah, has an unusually attractive pharmacy. It is under the management of R. S. McAllister.



Here is another view of the establishment of the Co-operative Drug Co., showing the well-arranged prescription desk at the rear of the store. The all-essential sink is near-by.



George W. Hastings of Worcester, Mass., has located this pharmacy on the fourth floor of the Slater Building, and he limits his business absolutely to compounding prescriptions and furnishing sick-room and hospital supplies. A professional pharmacy in fact!



This shows a portion of the dispensing counter in the Hastings pharmacy. The physicians of Worcester have flocked to Mr. Hastings' support, and in the short period of three years he has built up a fine business. His record is most creditable.



Dockum's drug store in Wichita, Kansas, was remodeled, not long since and is one of the largest and most popular stores in the Southwest. The rear half of it indicates the extent to which the soda business has been developed.



A unique feature of the Dockum pharmacy is this "Beauty Shop" on the balcony. The fixtures of the store were furnished by the Quincy Show Case Works of Quincy, Ill., and the fountain by the Bishop-Babcock-Becker Co. of Cleveland.



Here is one of the windows of the Minot Drug Co., Minot, N. D., devoted to the exploitation of the prescription business. The trim was made by Sigurd Sigurdson.



This unique and artistic fountain, done in Mission style, was installed last summer in the store of Boyle & Rowe, Massillon, Ohio, by the Walrus Manufacturing Company.



Some Home-made Show Cards.

The druggist who made these signs contributes a letter on page 516 of this issue of the BULLETIN touching on his methods. Nearly all the cards are 18 by 23 inches in size. The illustrations are mostly magazine-cover designs pasted on and cleverly "touched up" so as to seem a part of the card. This effect is also heightened by selecting ink colors for the lettering like those in the pictures.

DISPENSING "606" OR SALVARSAN.

How to Prepare Ampoules of the Chemical for Intermuscular and Intravenous Injections—A Simple, Clear Exposition of the Process Used by a Detroit Pharmacist.

Druggists are showing considerable interest in the pharmacy of salvarsan, Ehrlich's new cure for syphilis. Among these is Mr. Seltzer of Detroit. He has studied the different



Leonard A. Seltzer.

methods of administering the remarkable drug and has doubtless by experience developed a dispensing technique more or less his own. The neutral suspension of the chemical is not mentioned here because that method of administration appears to be the least approved. The intermuscular method is usually advocated, although the intravenous is used very commonly in Germany. It will be observed that the process of preparing the intermuscular injections is very similar to that employed for intravenous use.

METHOD OF PREPARING SALVARSAN FOR INTERMUSCULAR INJECTION.

The apparatus consists of a one-ounce funnel inverted over a hole in a hot-water bath, and a graduate inverted over a crack in the top of the bath. A test tube is set over the outlet of the funnel, while inside of the funnel

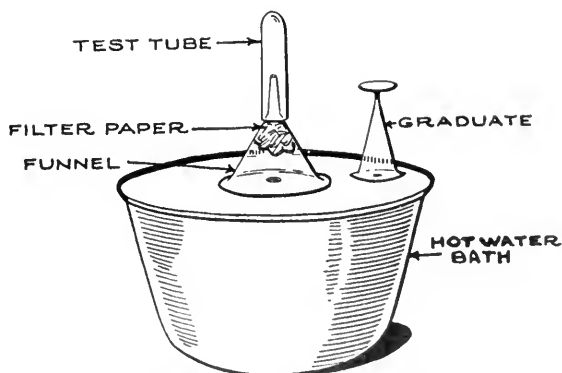
rests a filter paper. All this apparatus is sterilized by the escaping steam.

Pour less than 20 Cc. of water into the test tube and bring it to a boil with a Bunsen burner. Meanwhile file off the ampoule of "606" and empty the content into the test tube. It dissolves immediately. Then take a dropping bottle in which is kept a sterilized 15-per-cent solution of sodium hydroxide.

Drop the sodium hydroxide solution into the test tube drop by drop, giving the dropper a slight rotary motion so that the drops will slide down the sides of the test tube, making that area alkaline. Add just a few drops at first and shake. A precipitate is formed which at first dissolves. On adding more sodium hydroxide, the precipitate becomes permanent, but on continuing the additions the precipitate begins once more to redissolve.

Here one must be careful. When the precipitate is pretty well dissolved, one must avoid an excess of alkali. Indicators are not necessary as the dispenser can tell with his own eye whether the end reaction is about to take place—*i.e.*, when one drop more will make complete solution.

Next take a hot funnel, filter the salvarsan



Apparatus used by Mr. Seltzer for the preparation of salvarsan.

solution and pour sterilized water through the filter sufficient to make 20 Cc. in the receiving graduate.

Suck up the salvarsan with a filter pump into the ampoule. In this operation the am-

poule is open at both ends, one being connected with a filter pump, the other with the salvarsan. Seal the ampoule with a Bunsen burner and the operation is finished.

So much for the preparation of salvarsan for intermuscular injection.

PREPARING SALVARSAN FOR INTRAVENOUS INJECTION.

For the intravenous method sterilize 225 Cc. of normal saline solution. Prepare the salvarsan as in the intermuscular method, but filter it into this warm saline solution instead of a graduate. The saline solution must be free from any specks such as hairs from the filter paper. By using fresh distilled water the necessity of filtering is avoided, and the presence of hairs eliminated. Foreign particles are dangerous in the intravenous solution because they tend to form emboli.

After the end reaction opalescence is apt to set in. For that reason, in preparing salvarsan for intravenous injection Mr. Seltzer makes it a uniform practice to add about six drops of the sodium hydroxide solution in ex-

cess of the usual amount before filtering the solution of the chemical. This prevents opalescence or the formation of particles that may cause emboli. Specks or solid particles are less objectionable in a solution intended for intermuscular administration, but in the intravenous solution they are dangerous.

The ampoule of salvarsan solution shown in the illustration is for intermuscular injection, and is about half the original size. The



Miniature reproduction of ampoule used by Mr. Seltzer to dispense salvarsan.

ampoule for intravenous injection is of the same shape but much larger, having a capacity of 250 to 300 Cc. Mr. Seltzer uses this shape of ampoule for the intravenous solution because it can be easily suspended. A rubber tube connected with a needle is attached to the lower end of the ampoule, and the fluid passes into the vein by force of gravity.

ARE YOU MAKING ENOUGH MONEY?

An Address Delivered upon Invitation Before the Nebraska State Pharmaceutical Association at this Year's Convention.

By HARRY B. MASON,
Editor of the Bulletin of Pharmacy.

I am informed that you are to have papers at this meeting from practical druggists telling in the first place how to buy goods and in the second place how to sell them. But many a man buys closely on the one hand, and sells a large volume of goods on the other, without making anything like as much money as he should. There is a large and important field of study for every merchant between the operation of buying and the operation of selling, and perhaps I can roam over this for a few minutes with some little degree of interest.

GROWING COMPETITION DEMANDS BETTER BUSINESS METHODS.

I want to lay down the proposition first that the majority of druggists do not make as much money as they should. Why? Because as a

rule they are not good enough business men. Either consciously or unconsciously the druggist clings to the tradition that he is a professional man who does not need to be schooled in business methods, and in these days of increasing competition he will find himself pushed closer and closer to the wall if he does not wake up in time.

For competition in a democratic and progressive country like America must always, and will always, grow in severity. It cannot be helped. W. A. Hover, of Denver, Colorado, one of the thinking men in the jobbing line, has recently compiled some statistics showing that the cost of doing business in the wholesale drug trade has gradually increased from 9 per cent in 1878 to 12.85 per cent in 1909. Partially in explanation of this in-

crease he found also that the percentage of sales secured without the assistance of travelers *decreased* from 46.84 in 1899 to 35.5 in 1909.

In other words, what might be called voluntary business fell off so markedly that it was necessary to use more and more traveling men to keep the sales up to a given point. Rather a striking evidence of growing competition!

What is true in the jobbing trade is true also in the retail trade. Among the competitors of the retailer are the department stores, the itinerant venders, and more recently, particularly in the East, the growing number of chain stores in the drug line itself. These forms of competition we shall always have—we cannot hope to wipe them off the face of the earth. They will grow more numerous instead of less numerous, and it is folly to blink the facts. The only thing to do is to look them squarely in the face and make the most of them.

I do not suppose you have been worried very much out here by the chain-store rumors which have disturbed the slumbers of some of the druggists in the East, but you will perhaps recall the sensation sprung on the A. Ph. A. a year ago by President Rusby, who feared that an attempt to monopolize the retail business of the country would sooner or later be made by large financial interests. I myself do not share these fears. I do look, however, for an increase in the consolidation movement in the retail branch of the business just as a similar movement is developing in the wholesale trade here and there throughout the country. This of itself is an outgrowth of competition. It represents an effort to meet opposition. The fundamental purpose is to reduce expenses, prevent duplication of effort, and realize economies of one kind and another. Doubtless in self-preservation druggists themselves will resort to consolidation in limited measure, as they have already done in a number of instances. But, waving this aside, the lesson to be learned from all this increasing competition is this, that the druggist must be a keener and ever shrewder business man in order that he may be in advance of the times and go his competitors one better. It is up to him to keep awake every minute of the day, and I speak of these conditions solely for the pur-

pose of showing the necessity of more aggressive business methods.

The average druggist doesn't study his business as a business. He doesn't know how to practice business economies. He doesn't avail himself of his cash discounts. He doesn't make prompt collections. He doesn't watch his book accounts with creditors. He isn't careful to prevent the accumulation of dead stock. He takes no pains to understand the laws of trade and the peculiarities of the purchasing public. The druggist of the future must study these matters closely. He must realize that he is under the necessity of buying wisely, selling aggressively, and advertising skilfully. He must take annual inventories; he must know his percentage of expense; he must understand his percentage of profit; and he must realize whether a given transaction yields him returns or causes him an actual loss.

FOUR THINGS EVERY DRUGGIST SHOULD KNOW.

Now I want to confine myself to just one phase of this large subject. I have for fifteen years been observing the conditions under which druggists do business; I have visited them frequently in their stores; I have conducted a large correspondence with them; and the journal with which I am connected has examined and commented on hundreds of annual statements from druggists. It is my conviction that a lot of men simply do not know how much money they are actually making, and have never taken the trouble to find out with any accuracy. If they knew the facts they would be very much surprised on the one hand, but on the other they would be in position to make radical improvements. I propose to limit myself very largely to a discussion of how the facts can best be determined.

As I have said on at least one occasion before this, I believe there are certainly four things which every druggist should know about his business, and in repeating these I am quoting briefly from a paper read several years ago:

1. Every druggist should know his percentage expense of doing business.
2. He should know his average gross profit, estimated on the total volume of sales.
3. He should know whether certain impor-

tant lines or departments, like those involving cigars, candy, and soda, are making or losing money for him, and if they are making money, how much.

4. He should know for a certainty what his total annual earnings are from the entire business.

A little later on I propose to indicate how these four things can be easily determined, but first I should like to say a few words about the necessity of having such information. No merchant is in condition to conduct his business intelligently unless he knows what his percentage of expense and his percentage of profit are. These data are of vital significance, and they throw a flood of light upon the business and make improvements possible in a thousand ways.

PERCENTAGES OF EXPENSE AND GROSS PROFIT.

Suppose it costs 30 per cent to do business—30 cents to sell a dollar's worth of goods. Here, then, is a fact which should be considered every time the price is established on an article or line of articles. It is of course perfectly true that one cannot always advance the selling price sufficiently beyond the line of expense. Many "patents" have to be sold at an actual loss, when the cost of selling them has been added to the cost of purchasing them. Many other articles, particularly in cities where the competition of the large druggists and the department stores keeps prices down, have to be sold at very close margins if not at an actual loss. But above and beyond such lines, there is abundant opportunity here and there to establish such selling prices, and to carry such lines, as will counterbalance the losses and make the gross profit average up satisfactorily.

In another paper I have commended, and I want again to commend, the practice of a successful Detroit druggist who aims to make 100 per cent advance on drugs and prescriptions, and 75 per cent advance on sundries. Even at that his average gross profit, based on the sale price, is but 40, the small margins or even losses on "patents" and other goods bringing down the figure greatly. It will perhaps be remembered that Mr. Falkenberg, the Chicago druggist, attained some notoriety in the drug journals a few years ago by insisting that one should make 200 per cent advance on his prescriptions if he desired to get an adequate re-

ward for his time and skill, and if he wanted to have his business as a whole yield him the returns that ought to be realized—and it may be said in passing that Mr. Falkenberg wasn't so far wrong as he might have been.

WHAT THE NET PROFIT OUGHT TO BE.

In general it may be said that there ought to be a difference of at least 10 per cent between the percentage expense and the gross profit—and the ideal should be to attain as nearly to the 15-per-cent mark as possible. The average expense of the average druggist is about 30 per cent. The average gross profit is about 40 per cent—both figures, of course, being based on the volume of sales. If the expenses can be screwed down a point or two, or the profit screwed up, or if both feats can be performed, so much the better. But at least the two factors should be kept at the respectable distance apart of ten points. As a drug business gets up into fifteen or eighteen or twenty thousand dollars a year, it ought to be practicable in most cases to have a percentage expense not greater than 23 or 25, and in the smaller towns a point lower down than that can be reached.

If the facts could be known, I have no doubt that many druggists would find to their great surprise that they were actually making much less than 10 per cent net. A Chicago druggist, recently persuaded to estimate his percentage expense and his gross profit, was chagrined to discover that one was 32 per cent and the other 36 per cent. Once in possession of the facts he was in position to apply corrective agencies wherever possible, and I venture to say that he will never again be lulling himself to sleep in the fool's paradise from which he was so grateful to escape.

ARE THE DEPARTMENTS MAKING MONEY?

Now the third essential I have stated is that the pharmacist "*should know whether certain important lines or departments, like those involving cigars, candy, and soda, are making or losing money for him, and if they are making money, how much.*"

I have within the last few years seen many letters from retailers throughout the country which have been full of significance, and which, could I quote them, would illustrate and enforce many of the points which I am

striving to make clear. Several of the letters would be found freighted with meaning in this particular connection.

In one case, that of a Cleveland druggist, we convinced him from his annual statement that he was losing money constantly on both his candy and cigar departments. He had kept separate records of these two departments and of the soda business also. From the figures we found that while the cigar trade yielded theoretical profits of perhaps 25 or 30 per cent, he had actually made but 16 per cent, and that, since his percentage expense was 28, he had lost 12 per cent! Just where the leak was I do not know. Once in a while the clerks smoke "on the house." Occasionally cigars are filched from the tops of the cases where some dealers exhibit them. In certain cities competition with the United Cigar Stores Company and other concerns brings the selling prices down below a living profit for the retailer operating under a considerable expense.

The candy department of this Cleveland druggist was seen to yield him a gross profit of only 25 per cent, and so he lost 3 per cent

sales of departments like soda, candy, cigars, and any other line that the proprietor may want to watch for a year or perhaps constantly.

From such records as these the percentage expense is gotten by dividing the annual expenses by the annual sales. Suppose, for instance, you have annual sales of \$12,000 and expenses of \$3600: you know at once, then, that your percentage expense is 30. The percentage of gross profit, on the other hand, is gotten by dividing the annual gross profits by the annual sales. We have assumed annual sales of \$12,000; very well, then, let us assume gross profits of \$4800: we now have a percentage of gross profit amounting to 40. In similar manner the necessary facts regarding the success or failure of certain departments in the store are gleaned from the department records, while the total net earnings of the business are gotten by merely adding the net profits to the proprietor's salary, the latter being figured in the expense account.

Here is a type of ledger which might be used for keeping these business records:

DATE.	SALES.			PURCHASES.	EXPENSES.			CIGARS.		SODA.		CANDY.	
	Cash.	Credit.	Total.		Sell.	Clerks.	Miscel's.	Sales.	Pur- chases.	Sales.	Pur- chases.	Sales.	Pur- chases.
January 1.....													
January 2.....													
January 3.....													

on that. His percentage expense, estimated without his personal salary, was 23, so that the candy department paid little even toward his own salary, and less than nothing toward making his capital productive. It may be said in passing that bulk candy involves a bigger waste than is realized by most druggists. Clerks are often careless in weighing it, and there is a temptation to take a piece now and then, besides handing one to the customer—especially if the latter happens to be an attractive girl.

HOW TO KEEP BUSINESS RECORDS.

Now how are you to find out these four things which I have declared to be vitally essential to every business man? They are easily determined if records are kept of (1) the sales, (2) the purchases, (3) the expenses, (4) the inventory, and (5) the purchases and

As for the original entries, these could be treated exactly as you treat charges or credits for or against customers. Make them in a day-book if you use a day-book; put them on slips if you use slips. Every time you buy a bill of goods, or pay out money for an expense, or figure up the day's sales, or do anything else falling within the scope of these business records, simply enter it as you would when a customer buys goods on credit. In posting from the day-book or the slips, carry the customers' accounts to the regular ledger, and the business records to the special ledger, giving totals only. If it takes you ten minutes every morning to do your regular bookkeeping, it won't take you three minutes more to include this special business bookkeeping. Is it not worth this slight expense of effort? The advantages are great and far-reaching.

A FORM OF ANNUAL STATEMENT.

At the end of the year the wise druggist desires to get his facts together and to draw up some form of annual statement indicating what the year has done for him. Here is a simple system which will answer the purpose, and which I have already suggested on several occasions:

Total sales.	Purchases.	Stock increase or decrease (inventory)	Cost of goods sold.	Gross profits.	Expenses.	Apparent net profits.	Depreciation in fixtures.	Depreciation in accounts.	Total depreciation.	Actual net profits.	Inventory stock.	Inventory fixtures.

The druggist who is able to fill out an annual statement of this kind in detail is in possession of the actual facts regarding his business—facts which he ought not to be without for a single instant if he desires to succeed in this day of ever-increasing competition and ever-developing attention to the science of commerce.

SOME COMMON ERRORS.

Unfortunately, however, many druggists who keep business records of this kind fall into errors of one sort or another. Some of them, for instance, charge freight and drayage against expense, whereas they should be charged against merchandise—for they are properly a part of the cost of the goods. Others fail to include a salary for themselves among their expenses, and thus mislead and deceive themselves regarding their profits. Still others are astonishingly careless about recording the little odds and ends of expenses. It is quite unnecessary to say that the careful merchant should be as particular to make entries of this kind as in making charges against his customers. If he is going to keep business records at all he should keep them accurately. Not long ago, for instance, I examined the statement of a pharmacist and found that, according to the man's own figures, \$457.79 had been spent for expenses and never recorded.

At the end of the year he was just this much poorer than he thought he was.

Another common error is that of failing to write off anything for depreciation in stock, fixtures and book accounts. That this omission seriously affects the figures as to profits and real earnings is patent on the surface. A soda fountain, for instance, undergoes a rapid decrease in value from year to year. With shelving and show-cases the depreciation is less marked. With stock it is a smaller consideration yet—that is, if the druggist keeps his stock moving, as he ought to do. To keep on valuing all these things every year at their original cost is simply to deceive oneself as to the extent of his profits—and self-deception is the most short-sighted and foolish kind. Wise druggists annually “write off” 10 per cent on their soda fountain and at least 5 per cent on their fixtures. A similar depreciation really takes place in the value of the book accounts. Some of them cannot be collected, and to have them represented in the assets at their face value year after year is to practice a method which no good business man would tolerate for an instant.

THE CRIME OF IGNORING INVENTORIES.

The most serious mistake of all, however, is that of failing to take regular annual inventories. No such system of business accounting as I have tried to describe is worth a pica-yune unless it is based on inventory findings. There are thousands of druggists who delude themselves into the lazy and comforting deception that their stock remains the same, and that the money which they have spent for living during the year, plus that on hand at the year's completion, represents the net profit which their business has yielded them. And yet, in my correspondence with druggists, I have been brought in contact with numerous cases where the inventory figures have disclosed annual differences in the value of the stock to the extent of anywhere from \$200 to \$2000, according to the size of the store and the nature of the circumstances. The stock in any store is constantly shifting; the prices are forever fluctuating; the fixtures, and particularly the soda fountain and its appurtenances, are always undergoing depreciation, and the druggist who is not aware of the exact nature and extent of these changes is not in position to know where he stands. He may

fancy his percentage of gross profit to be 40 when in fact it is only 30, and he may consequently be losing money on many transactions which he fondly believes are yielding him good returns. He may be eating up his capital slowly in utter ignorance of it—and ignorance is not always bliss when the awakening comes!

SOME CONVINCING FACTS ABOUT PROFITS.

I have already expressed the opinion that many druggists do not make as much money as they should, and that this is frequently because they really do not know what they are making, and are assuming their profits to be considerably larger than they actually are. To show the great disparity of profits realized by different druggists, let me give the substance of a paper which I read before the Indianapolis meeting of the A. Ph. A. in 1906, and which may be found in the proceedings of that year. On that occasion I presented the data regarding eleven druggists and their incomes. I found, for instance, that the percentage of gross profit ranged from 32 to 51! Let this sink in, gentlemen—gross profits ranging from 32 to 51 per cent! Think of it! Two of the eleven men did just about the same volume of business, and yet one realized a total income of \$4286 a year, while the other made \$7670. There were three others with businesses virtually of the same size, but while two of them secured incomes nearly alike, the third fell short of the others about \$800. Then there was a Chicago druggist, with a business of nearly \$18,000, earning only as much (\$2000) as a Detroit druggist with a business a little less than one-half as large.

Of course you will say right away that the conditions were not equal in these cases, and that it is easily possible for a man in one town, where cut prices do not prevail, to make a good deal more money from a given volume of business than a man in another town could do whose location was less fortunate. But this consideration was taken into careful account in drawing up the schedules, and a comparison was made between druggists who were doing business under practically identical conditions. The differences were therefore due almost entirely to the men themselves and not to external and outside influences. And these differences were so great that I believe they

prove the truth of the statement upon which this paper is based, namely, that druggists are not sufficiently careful commercial men, that they do not know the real facts concerning their business, and that they do not make as much money as they might and would make if they were in possession of more accurate information.

HOW MUCH MONEY SHOULD THE DRUGGIST MAKE?

I have come to the conclusion, as I have already intimated in part, that the average druggist, doing a business ranging from seven to thirteen or fifteen thousand dollars a year, should, if he desires his business to pay him the income that he deserves to get from it, secure average gross profits of at least 40 per cent, and cut down his percentage expense to at most 30 per cent, and 25 per cent if possible. With the expenses at 30 per cent, however, this means net profits of 10 per cent. On a business of ten thousand, say, net earnings would then be realized of \$1000, which, added to the salary of \$1200 that we may assume the druggist to pay himself, and which is figured in the expense account, means a total income from the business of \$2200. Is not this little enough? With a percentage expense reduced to 25 per cent, which in most localities is practicable with a \$10,000 business, \$500 more would be added to the income, making total earnings \$2700.

Many druggists are realizing this very feasible and attainable ideal, and I think it is one which any pharmacist may hold up to himself with value. A net profit of 10 per cent is the very least that a druggist should be content with. Will it surprise you if I make the statement that the big chain-store corporations make even more than this? The common notion is that these people, doing business on a cut-rate and low-price basis, realize a small net profit, making up for this in the large volume of trade transacted. This assumption is contrary to the facts. The big druggists offer low prices as a bait on certain popular things like proprietary articles, but it has been my observation that in their prescription and certain other departments they have the nerve to charge better prices than the average druggist. They know to a cent just what their expenses and profits are, and they know what they have

to do in order to come out right at the end of the year. The consequence is that they make more money on their investment than the average man does. Some years ago, for instance, I discovered that the great Hegeman Corporation in New York realized a net profit of 12 per cent, the expense being 18 and the gross profit 30. This gross profit would be small for the ordinary druggist, but by a wise and experienced business administration, aided,

of course, by the volume of sales, the Hegeman people had cut down their expenses to a very low point and were making the business yield them a nice net profit—and the net profit is what counts.

Should not the average retail druggist make just as much proportionately on his business? Of course he should! Then why doesn't he do it? He can if he goes about the task intelligently and with determination.

SHOW-CARD WRITING.

Obtaining Good Ideas for Signs—Several Formulas for Inks that Have Been Tried Successfully—Methods of Lettering—The Choice of Paper, Pens and Brushes, with Something About the Technique.

By ROY S. WARNACK,
New Orleans, La.

Show-card writing is a subject that should be of interest to all clerks and proprietors. It should appeal to the proprietor because it is



One of Mr. Warnack's cards.

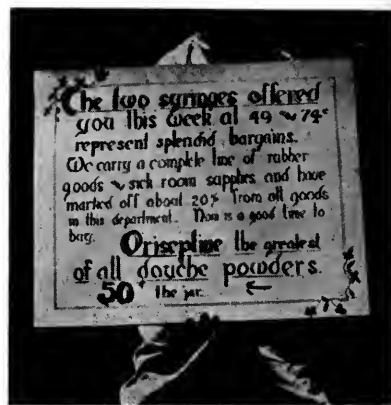
admitted that well-made, catchy signs increase the immediate business on any special article in addition to the cumulative results that follow. Moreover, when cards outlining the general policy of the store are exhibited in the store, the customers are bound to see them. I am sure a great amount of good results from such advertising.

GOOD SLOGANS REMEMBERED.

I have frequently overheard customers repeating to others, almost word for word, some slogan we have had on show-cards in our store. Having read them many times people

repeat them unconsciously. Some of the sayings were: "You can be sure to get it at Schertz's. He is never just out." "If you bought it at the Schertz Pharmacy and it isn't just as represented, take it back and get your money—no argument about it, either."

Show-cards are of especial interest to the clerk because anything that increases the business of his employer means more money for the help. Not only does show-card writing increase his earning power but it teaches him to think. He is constantly on the alert for new ideas. In every nook and corner of the drug journals he hunts for new material, es-



Another Warnack card.

pecially in the advertising sections. All this tends to make him a more efficient clerk, also a better proprietor—and we all hope to be

proprietors some time. Then again this thoroughly acquaints him with all of the nationally advertised goods. As the national advertisers usually spend large sums of money for expert advertising men, it follows that one is sure to profit by reading their ads. There are many cases where a slight change in the wording of these ads. will make splendid newspaper copy or show-cards for the retail druggist. Of course, if one can originate every ad. or card he writes, so much the better, especially if they have any real merit. But it is better to be a good imitator than a poor originator.

Every month the drug journals contain window displays with accompanying cards that have been used successfully by druggists in different cities. I take it that these photographs are published for the general good of the trade. If they appeal to me I try to get in on the ground floor and duplicate them before any one else.

But this is digressing. I started out to write something about show-cards; so I had better get down to details. There is no reason why any clerk with a little practice should not make good readable signs. The most common error of the novice is to imagine a sign can be made with a camel's-hair brush. This is impossible as the bristles are too soft. They have no elasticity whatever. Consequently the brush becomes clogged with ink after the first dip, bends to a right angle and remains in that condition. The best brushes for general work are called "riggers" and may be had at any paint store. Three sizes will be sufficient for the beginner, Nos. 7, 9, and 12, and the total cost will be about one dollar. A Soennecken pen No. 133 will be found very useful, too, for making a stroke about one-eighth of an inch wide.

SEVERAL INKS.

As to paints or inks, the majority of those on the market are objectionable in that they make a letter with a highly glazed surface. I have used the following black ink with much success:

Lampblack	1 ounce.
Alcohol	2 ounces.
Gum arabic.....	1 ounce.

Directions: Rub the lampblack with alcohol. Make a mucilage of the gum arabic with sufficient water. Mix the two lots and add water enough to make 8 ounces.

This formula was contributed to the BULLETIN by Paul L. McConomy of Philadelphia, and cannot be improved upon.

For blue, red and white inks I use ultramarine blue, carmine, and zinc oxide, respectively, with a small quantity of acacia and just enough water to bring the whole to the consistency of a thin syrup.

These are all the colors I use because the ingredients in them are found in any drug store. In addition to these colors I use a twenty-five-cent set of Prang's water colors, which are useful in making fancy colored capitals and in shading letters. Gold paint is also useful for this.

Cardboard for show-cards may be obtained from any stationers' supply house in pieces 22x28, any desired color, at fifty cents a dozen. These make excellent signs in their original size or cut once, 11x14. Do not buy bristol-board with a glazed surface as it does not take the ink. A card with a moderately soft surface is necessary.

STYLES OF LETTERING.

As to the style of lettering, the beginner will need some book containing alphabets of various styles, and from this he should select one or two alphabets, practicing them until he becomes fairly proficient in executing them. He will be surprised how quickly he can learn to make good letters. If he practices diligently for a week or so his first attempt at a sign will be a revelation to him.

W. A. Thompson of Pontiac, Mich., publishes a book called the "Practical Show-card Instructor," price \$1.00, which has been worth many times that amount to me. The two styles of lettering I have used most are the Brush stroke alphabet and the Brush text. I have found the latter best for neat, quick work and use it almost exclusively; nearly all of the cards here illustrated are done in this style of lettering. The pictures on the cards are cut-outs from magazines and from Sunday papers. A border is painted around them which makes it appear as if they were painted directly on the card.

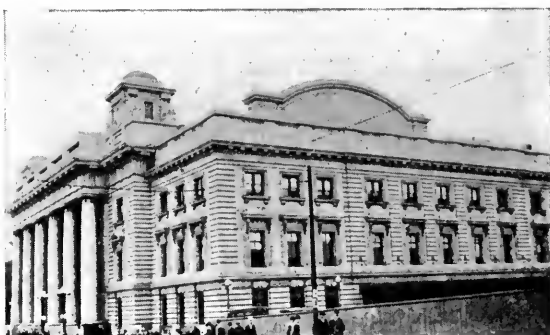
In conclusion let me say that when clerks generally understand what an asset a knowledge of show-card writing will be to them, there will be many more amateurs than at present.

A RAILROAD-STATION PHARMACY.

The Store Located in the New \$24,000,000 Depot in Chicago of the Northwestern Railroad—One of the Buck & Rayner Group—Some Unique Features.

The new twenty-four million dollar station of the Northwestern Railroad in Chicago is easily the best railway terminus in the country, aside from the recently opened Pennsylvania station in New York.

The station opens through its main entrance onto the north side of Madison Street just west of the Chicago River. It is a full block



The new Northwestern Railroad Station in Chicago.

in width, and, including the train sheds, extends four blocks north to Lake Street.

Every effort was made by the officers of the railroad company to have a station up to date in every respect, and combining beauty and dignity of architecture with utility and the greatest number of conveniences for patrons of the road.

Space does not here permit of even enumerating these various features, but one of particular interest seems worthy of more than a passing word. Reference is made to the spacious and well-arranged drug store ranking with the very best in Chicago, which is located on the ground level and just to the left of the main entrance from Madison Street.

THE STORE.

This valuable drug-store privilege was let to Buck & Rayner, who already have three other down-town drug stores in Chicago.

Mr. Stephen Hexter, general business manager of all the Buck & Rayner stores, took personal charge of the installation of stock, fixtures, and decorations, and by dint of hard work extending all through the last night had

everything in readiness for the opening except the \$5000 soda fountain, which was delayed a little in delivery.

Palms, potted plants and cut flowers were everywhere in evidence as decorations on the opening day, and a number of them have been since retained. The electric-light fixtures of brass, with large white globes pendent from heavy brass chains, add much to the decorative effect besides giving a soft and well-diffused light.

The store is of rectangular shape, lighted on one side from the street. It has a direct entrance onto Clinton Street and two others into the station.

SANITARY PAPER CUPS AT THE FOUNTAIN!

A fine Becker iceless soda fountain is located exactly in the middle of the store. It is of white marble with onyx standards for the mineral-water faucets. All parts are open and visible. At the surrounding marble counter are revolving seats for thirty people with room for tables beyond. An innovation at the



Interior of The Station Drug-store, owned by Buck & Rayner.

fountain is the exclusive use of sanitary paper containers for all drinks. These are dispensed from a special cylindrical glass retainer so that cups not in use are at all times protected from dirt and dust. Handsome electric lamps surmount the onyx standards which support the mineral-water faucets. All syrups, cream, etc., are kept below and back of the marble counter.

A gallery, about twelve feet wide, at the

west end of the store, and fifteen feet above the floor, gives a large amount of extra space for shelves, cases, and prescription work. The cashier's desk, in a brass cage, is at the east end.

MAHOGANY FIXTURES.

The fixtures are of full mahogany and plate glass. The counters are extra high with all glass fronts fully displaying all goods on the shelves below. The walls are finished in white enamel and buff.

Besides the usual stock of drugs to be found in a modern store the following lines are also carried: Stationery, cigars, wines and

liquors, sundries, candies, postal cards, toilet articles, and perfumes.

Mr. Ad Kaufman is the manager in charge of the store, and Mr. W. T. Hill, formerly of the Hill & Leffingwell store on Davis Street, Evanston, Ill., is in charge of the pharmacy department. The other employees are as follows: Arthur A. Schroeder and W. O. Slater, registered pharmacists; Roy M. Jacobs, clerk; Fred Shepherd, soda dispenser, with two assistants; Misses Minnie Born and M. O. Lynch, and Mrs. A. F. Calhoun, cashiers. Extra porters and special help are called in from the other down-town stores as needed.

SOME PRACTICAL DISPENSING HINTS.

Gathered at Random by an Expert Pharmacist in His Work Behind the Prescription Counter.

By JOSEPH HART.

Chief Prescription Clerk for Powers & Estes, Portland, Oregon.

A great amount of information and even pleasure may be derived by noting the little things that frequently arise in the work of the pharmacist. Here are a few such observations:

A minute amount of white petrolatum is about the best thing that I have found to keep camphor in a powdered condition. The presence of petrolatum does not interfere with the use of the camphor.

The application of a solution containing 15 grains of oxalic acid to 1 ounce of water with a camel's-hair brush every half-hour or so is said to remove very effectually the blackness from around a freshly blackened eye.

The addition of a small amount of starch to liquid tooth preparations containing chalk retards the formation of that hard and difficultly diffusible sediment which is so annoying when one tries to make a sale.

In making cold cream and other ointments, the use of too high temperature not only wastes gas but detracts from a nice, elegantly finished product. Too much heat destroys that much desired glossy finish. It also causes the finished product to sink eventually, leaving the jar only partly filled. Or it may allow the cream to crack.

I find it quite convenient to use a drachm of water to two ounces of quinine and rub to a powder, allow the alkaloid to dry and then use

the powdered quinine for prescription work. This enables one to dispense smaller capsules, obviates the frequent refilling of the case bottle and does not require so much space for weighing nor waste in handling.

The proper cutting and placing of cotton over an unfilled box of capsules, tablets, etc., also the arrangement of evenly folded powders in the box, the neatly tied cap, unsoiled label and the legibly signed, not stamped, prescription check conduce to "Elegant and Careful Dispensing."

By the use of a small amount of water with a prescription for iron subcarbonate either alone or in combination with other dry powders to be put in capsules, one is enabled to use a much smaller capsule. And the finished capsule will be bright and clean, the capsule being easily packed and consuming about one-fourth the amount of time as by the old method.

The irritation following the application to the eyes of a solution of tannic acid in glycerin made with the aid of heat may be obviated if the acid be allowed to dissolve by cold maceration in the pure glycerin. I keep a clear, lightly colored solution in concentrated form for rapid dispensing.

Gasoline cleans and polishes my ointment containers quite prettily.

I find it a good plan not to keep a stock of

empty capsules for prescription use in cardboard containers, as the latter are the cause of so many different sizes of capsules being found in finished prescriptions. I use the glass-stoppered lozenge bottles, adding materially to appearances and utilizing a bottle that is too frequently thrown away. I wish to add that all paper labels are first coated with collodion, followed by two applications of varnish consisting of copal, mastic, sandarac, spirit of turpentine and alcohol. This little extra exertion not only adds to the appearance of the prescription department, giving a clean, shining, glassy appearance to the labels, but enables one to wash thoroughly the bottles containing oils, pills, tinctures, fluidextracts, etc.

Do you use powdered asafetida in making pills calling for asafetida as one of the ingredients? The result of my experience with the use of the best gum resin and massing with alcohol and a trace of glycerin has been very satisfactory. A large number of physicians contend that the therapeutic value of asafetida is due to the volatile oil it contains, and I do not believe you get an appreciable amount in the powdered gum resin.

Two drops of solution of formaldehyde seems very effectually to preserve a properly made mucilage of acacia for several months.

About the most slovenly thing to be sent out from a prescription case is a prescription calling for a pill mass enclosed in capsules, the mass being unevenly coated with lycopodium and forced into the gelatin investment. Why not finish the final rolling without the powder so as to get all the capsules uniform in color and to prevent a costly waste of lycopodium?

Instead of throwing away the ichthyol that runs down the clean sides of the container and soon becomes very solid, collect and store away this portion in clean jars to be used in making pills, etc.

The filling of frequent prescriptions for gargles containing some form of iron and a minute amount of antipyrin for coloring, represents an application of our knowledge of incompatibles as a means of obtaining innumerable and economical colors.

Another way of utilizing soap shavings is to make a shampoo for people who object to green soap. My formula, which yields a pretty clear and economical finished product, is: Water and alcohol, of each 4 ounces; Castile soap shavings, 1 ounce; potassium carbon-

ate, 2 drachms; tincture of quillaja, 1 ounce. Perfume to suit. Of course the soap, water, and potassium carbonate are first added, followed by the alcohol and tincture and perfume. After twenty-four hours filter.

By mounting and displaying, as are the weather reports, the adverse journalistic patient medicine criticisms you gain both the patronage and confidence of the physicians and quite forcibly impress the discriminating people.

While in the East this summer I was greatly impressed by the commendable manner of the real clever salesman. If not seemingly interesting his patron, he excused himself after calling another, perhaps the manager of the department, who invariably consummated the sale.

To obviate the disagreeable lumps and shreds of egg albumen in egg malted milk do not do as so many dispensers, put most of the ingredients in the glass and try to disintegrate them. Work up your egg and syrup in one glass and malted milk in another with a small portion of the milk to be used. Afterwards combine the two mixtures and finish the drink.

The prescribing of hydrogen peroxide with Dobell's solution should be discouraged. They are not only incompatible chemically but with some samples physically, the patient in more than one case becoming alarmed over the gas evolved and the change to a pinkish color.

A large number of physicians are now verifying the seemingly preposterous assertion that strychnine is more efficacious when given in solution than when given in tablets, pills, etc.

The results of quite a number of trials favor the administration of Fowler's solution in milk in preference to other vehicles.

Pancreatized olive oil is strongly advocated as an application to a dry scalp the night before the shampoo.

We frequently have orders for various amounts of silver nitrate in either glycerin or water. Some samples of silver nitrate produce the dark coloration at once and others in four or five hours, while others produce a cloudiness at once. After a series of experiments I find that these troubles may be greatly retarded or completely obviated by the use of pure neutral glycerin or distilled water to which an almost infinitesimal amount of pure concentrated nitric acid has been added.

I find it quite economically advantageous to put a little cotton in the bottom portion of Parke, Davis & Co.'s empty capsules number 13, and use therefor the cappings of the one- or two-drachm homeopathic bottles of toothache drops. This arrangement saves a vast

amount of cotton, and permits of a nice, evenly rolled finished package. Should a cork in any one package be so defective as to allow leakage, the cotton is in the correct place to absorb it and prevent ruining the other bottle wrappers.

"MY MOST EXCITING EXPERIENCE."

One Druggist Generously Quadruples the Dose of Morphine on a Prescription—Then He Spends a Sleepless Night Worrying Over His Error—The Fortunate Sequel.

MORPHINE POWDERS OF ONE GRAIN EACH!

BY CHARLES JOSEPH, RHODE ISLAND.

Once upon a time in the dim and remote past, when I was still young and not bald-headed, I decided to tie up for life to a charming young woman. The lady being willing, the first thing to do was to start in business and become a boss on my own account.

A suitable store was found, all my savings were paid down, and I returned to the store where I had been employed. This news had a bad effect on my employer, for he straightway was taken with pneumonia, and I could not leave him without a clerk. As a result, I did not show up in the Pennsylvania town where my store was located for six weeks, instead of two. The former proprietor made no kick at all. He just kept on buying nothing, and selling everything, and padded the daily receipts.

One Saturday night I showed up and took possession of a very much depleted stock. The former proprietor surrendered the key and went off. Next day was Sunday. That evening I received this prescription:

Morphine sulphate3 grains.
Sacch. alb.....½ drachm.

M. et div. in chart. No. 12.

Sig.: One every two hours until relieved.

I reached behind the prescription case, got out a mortar and pestle, and found a bottle marked "Morph. Sulph." with nothing in it!

I scribbled a note, gave it to the boy, and asked him to run to the next drug store and get 3 grains of morphine sulphate. As he went out of the door, it occurred to me that the nearest wholesaler was 70 miles away and I could expect no goods before Tuesday; so

I cried after him: "Tell him to give you 12 grains instead of three."

As the boy was known as an employèe of mine, he got it.

Meanwhile I had the sugar weighed off, the powder paper ready, and the box labeled. When the boy returned I dumped the contents of the paper into the mortar, triturated it well, and sent out the 12 powders.

There was quite a little trade, and after closing up, I sat down and wrote a long letter to that charming lady miles away and pictured the rosy future when she would be married to the leading pharmacist of that town. Then I went out, mailed that voluminous letter, and went back to the store to look around.

As I sat there after making out an order my eye lighted on a piece of paper lying on the floor. Mechanically I picked it up and read—"Morphine sulphate, 12 grs." Heavens! I had put that whole 12 grains into those powders instead of three! And I had been so elated with my business that I had not taken either name or address of the customer!

Jackass! Fool! Idiot! Murderer! My heart stopped beating. My head swam. One grain, and to be repeated if the patient was not dead! Oh ye gods! I ran to the directory, found the doctor's address, and ran there, with cold perspiration on my brow.

I rang the bell.

No answer.

Again I rang, this time with more success. Some one came to the door. "Is the doctor in?" I asked with suppressed emotion. "No," came the reply, "the doctor is not at home. He was summoned on a hurry call about half an hour ago. No, I don't know where he went."

Can you imagine my helpless feelings? To know that somewhere in the town a patient was dying as a result of my idiotic carelessness, most drove me mad. "*The doctor is there now,*" I thought. What else could that hurry call have been?"

Back to the store I went, determined at least to face the music, should the physician call there. Telephones were not plentiful those days.

I returned, lighted the gas behind the prescription case, and sat down. It was a cold, moonlight night, and at intervals some belated one passed with hurried step, while I trembled, fearing each approach was that of the Doctor.

"Oh you idiot, you confounded jackass! *You'll* marry a trusting girl all right. You'll make a shining light in pharmacy!" Thus my thoughts rambled. "Jail, manslaughter, disgrace to family, heart-broken girl." These were my only utterances. "Yes, you confounded slobbering crack-brained ass, you murderer," I cried. Pen cannot portray the agony of those hours. I sat there, no one knows how long, when suddenly somebody rattled the store door. I jumped to my feet, and emerging from behind the prescription case I saw through the glass of the door the shining buttons and figure of a policeman peering into the store.

"Here he is!" How my heart did beat! "Now off to the station. To-morrow the papers will tell all about you." I trembled so I could scarcely unlock the door when I heard: "Why is this light burning in here? The store is usually dark. Who are you? What are you doing here? Where is old Mr. —?"

Relief, but not relief. I explained I was the new proprietor, had just taken possession day before, could not sleep (if he only knew why!) and was just sitting in the store. Finally he departed satisfied.

Once more I sat down. I imagined an aged father, a loved mother, some one, somebody dear to the dying son, at this moment, all on account of myself.

Finally, after 4 A.M. I dozed off and straightway fell to dreaming. An angry mob was putting a rope around my neck, they were raising me on a box, preliminary to lynching me; the father of the child I had killed was tying the rope to the lamppost himself. Then he kicked away the box—the rope tightened.

I fell and awoke. Some one was at the door. I opened it and there stood a professional looking man. "That must be the doctor after me now, sure!" I thought. I opened the door. "I am Dr. —," he said. It was he. "I want a 4-ounce can of Squibb's ether and 1 ounce of fluidextract of ergot as quick as you can!"

I tried to tell him about the prescription, but he had no time to talk now. "I guess you are the new man," he said. "Come and see me to-morrow and I'll pay you then. Can't stop now." Off he went.

Relief! He didn't know anything yet. That was sure.

Eventually morning dawned. No one had come. I opened shop, though scarcely able to stand, but somehow I couldn't make up my mind to visit that doctor. I let the morning slip by, and finally persuaded myself that *now*, whatever happened, it would be useless to advertise myself; so I called myself a coward, a fiend, a fool, but for some reason did nothing, said nothing.

Four days went around, days of worry, nights of dreams and apprehension, when one morning back came that identical box to be renewed. It *was* renewed. Questioning brought out the fact that the patient had another "spell." The powder had helped the first time, etc.

Well, only 3 grains went in this time. On the next day the box was brought back with the statement, "*No good, they ain't strong enough!*"

I told them probably the patient was getting used to the medicine, when I was startled and relieved by the reply: "Yes, I wouldn't be surprised if she were; for if there is morphine in them, they don't amount to much, as she *takes morphine right along for her pains*, but the doctor don't know that." Praises to God! Saved, saved!

Never since that time, twenty-six years ago, have I handled a paper *without first* reading the marks on it. Never since then have I put up a prescription without getting the patient's name and address. Never since then have I put up a prescription without checking it myself if alone, or by a second person if possible.

Saved, but only by dumb luck. I *did* marry that girl. I *did* become a pharmacist well known and respected, but *that night*, never will I forget it! Only the Almighty knows

why I am a "careful man," only He knows the secret and real reason why "he is so d—d precise."

May others benefit by this recital, now that the secret is out. No dispenser can let his thoughts go wool-gathering.

COMMENT ON THE NEW N. F. FORMULAS.

The Committee of Revision Asks for Criticisms of Its Work Prior to Publication, and so Something is Said about a Few of Its Proposed Elixirs.

Most of the drug journals have recently printed a collection of formulæ intended for publication in the next issue of the National Formulary, and sent out by the N. F. Committee in order that they could be subjected to trial and criticism. While the formulas themselves have appeared quite generally, however, no comments have been forthcoming, and we are therefore printing three or four of the formulas for the purpose of saying a few words about them:

ELIXIR AMYGDALÆ COMPOSITUM.

(Compound Elixir of Almond.)

Oil of bitter almond.....	0.5 Cc.
Vanillin	1.0 Gm.
Stronger orange-flower water.....	150.0 Cc.
Alcohol	50.0 Cc.
Syrup	400.0 Cc.
Kieselguhr	10.0 Gm.
Distilled water, a sufficient quantity to make	1000.0 Cc.

Dissolve the oil of bitter almond and the vanillin in the alcohol, add the syrup and then the stronger orange-flower water, then the distilled water in several portions, shaking the mixture thoroughly after each addition; then add the kieselguhr, mix and filter, returning the first portion of the filtrate, if necessary, until it runs through clear. Lastly, wash the filter with sufficient of a mixture of alcohol 1 volume and distilled water 10 volumes, until 1000 Cc. of product is obtained.

ELIXIR CARDAMOMI COMPOSITUM.

(Compound Elixir of Cardamom.)

Compound spirit of cardamom.....	10 Cc.
Alcohol	90 Cc.
Syrup	400 Cc.
Kieselguhr	10 Gm.
Distilled water, a sufficient quantity to make	1000 Cc.

Mix the compound spirit of cardamom with the alcohol, add the syrup and then the distilled water in several portions, shaking the mixture thoroughly after each addition; then add the kieselguhr, mix and filter, returning the first portion of the filtrate, if necessary, till it runs through clear. Lastly, wash the filter with sufficient of a mixture of alcohol 1 volume and distilled water 9 volumes, until 1000 Cc. of product is obtained.

ELIXIR VANILLINI COMPOSITUM.

(Compound Elixir of Vanillin.)

Compound spirit of vanillin.....	20 Cc.
Alcohol	80 Cc.
Glycerin	25 Cc.
Syrup	300 Cc.
Kieselguhr	10 Gm.
Tincture of caramel.....	20 Cc.
Distilled water, a sufficient quantity to make	1000 Cc.

Mix the compound spirit of vanillin with the alcohol, add the glycerin, and then the syrup and the distilled water in several portions, shaking the mixture thoroughly after each addition; then add the kieselguhr, mix and filter, returning the first portion of the filtrate, if necessary, till it runs through clear. Lastly, wash the filter with a mixture of alcohol 1 volume and distilled water 9 volumes, until 980 Cc. of product is obtained. Finally, add 20 Cc. of tincture of caramel.

SPIRITUS VANILLINI COMPOSITUM.

(Compound Spirit of Vanillin.)

Vanillin	40 Gm.
Oil of orange.....	10 Cc.
Oil of cardamom.....	2 Cc.
Oil of cassia.....	1 Cc.
Alcohol, a sufficient quantity to make	200 Cc.

Dissolve the vanillin and the essential oils in 150 Cc. of alcohol and then add sufficient alcohol to obtain 200 Cc. of product. Store in tightly stoppered amber-colored vials, in a cool place, protected from light.

COMMENT ON SOME OF THE FORMULAS.

Since the N. F. Committee asks for criticisms of the foregoing formulas, we are moved to offer a few suggestions. Elixir flavors are largely a matter of individual taste. It seems likely that the proposed new elixirs will find general approval in so far as the character of their flavors is concerned, but to some of us they are too highly flavored to be continuously agreeable.

For instance:

Elixir Amygdalæ Compositus contains five times as much bitter almond oil, and three times as much orange-flower water, as the U.

S. P. syrup of almond (itself a pronounced flavor). In addition to this, furthermore, it contains one-sixth as much vanillin as the tincture of vanillin compound, which is used as a *flavoring extract* in dilutions of 1 to 100 or more when finally consumed.

It will readily be seen that for an elixir, ready to swallow without dilution, this product is very highly flavored. And the taste will last, whether one is in the mood for it or not. It is good for the elixir of three bromides, or for other bromides, but too strong for anything else.

Likewise elixir of cardamom compound. Oil of cardamom is a very powerful flavor—quite as powerful as bitter almond oil. But the elixir contains 1 Cc. of this oil per 1000, which is from one-half to two-thirds as strong as the U. S. P. tincture of cardamom com-

pound. Yet the latter makes a pronounced flavor when diluted to the extent of 1 to 60 or more.

We should prefer this elixir made with one-sixth the amount of compound spirit of cardamom.

As to elixir vanillin compound, this contains four grammes of vanillin in 1000. It is therefore two-thirds as strong as the *standard flavoring extracts* in the market! We may add that it is 20 times as strong as it should be. Think of invalids, with a "dark brown" taste in the mouth, with nothing appealing to the palate, having to swallow this three times a day or more!

The most successful elixirs are all *lightly* flavored—good but mild. *These* proposed products are made for strong men with iron-clad palates!

THE PHARMACEUTICAL INSTITUTE OF THE UNIVERSITY OF BERLIN.

We have had the privilege of examining the *Festschrift* on the Pharmaceutical Institute of the University of Berlin, which was issued in connection with the centenary of the univer-



The Pharmaceutical Institute of the University of Berlin.

sity last year. In its typographical appearance, variety of contents, and lucidity of style, it is highly creditable to its distinguished author, Professor Dr. Herman Thoms, the director of the Institute.

To American druggists it will be a matter of surprise to learn that a regular pharmaceutical course was not established at Germany's greatest university until 1895. It was opened in the winter of that year with 92 students, a

number that has materially increased since then. But the Institute did not have a permanent home until the winter of 1902-3, when the magnificent building which it occupies at present was formally dedicated. It is situated in Dahlem, a suburb of Berlin, where the botanical garden and museum, as well as Royal observatory, are also located.

The Institute is oblong in shape, of massive



A view of the large laboratory in the Pharmaceutical Institute.

construction, and consists of a three-story central building, with two-story wings. The east wing contains the spacious laboratories, and the one on the west end is entirely taken

up by the large auditorium, while the smaller laboratories and executive offices are located in the central structure. There is also a reading room and a well-stocked library. The basement is taken up by the machinery. The building was erected at a cost of 525,000 marks (\$124,687).

The grounds comprise 4000 square meters and include a tennis court for the students and experimental gardens for the culture of medicinal plants.

The equipment of the laboratories is up to date in every respect, much of the apparatus having been designed by Director Thoms himself.

The collections of drugs, chemicals and minerals, maintained for the benefit of the students, are very comprehensive. Separate departments are also devoted to industrial chemistry.

There are separate rooms for the distillation of sulphuretted hydrogen, hydrogen, and chlorine gas.

According to the curriculum, the course of the Institute covers four semesters and is very thorough. It includes instruction in electro-chemistry, physical chemistry, work in organic chemistry, toxicology, and even embraces instruction in manufacturing chemistry—besides, of course, the ordinary subjects.

A TOOTH-PASTE WINDOW.

By H. M. CURRY,
Ellsworth, Kansas.

This display was devoted, as may be seen, to Euthymol Tooth Paste. The arrangement of the cartons, signs, and samples, as furnished by Parke, Davis & Co., was about the best we had ever worked out. For a setting I used a

three dozen of the tooth-paste. The floor in front was covered with green burlap, and bore the word "Euthymol" spelled in letters made out of small sample packages. This was backed up by a light wood frame 5 by 10 feet in size,



board about 18 inches wide on boxes just high enough to accommodate the lower line of show-cards. The board was covered with a moire wall-paper which was perfectly white: on this were arranged the cartons and about

upon which the signs and large cut-outs were arranged, as may be seen in the illustration.

We displayed this trim two weeks. It did so well that it paid to work it overtime and give it an extra week.

THE DAY BEFORE CHRISTMAS.

By C. B. HACKING.

"Say, Mr. Hackens, has youse got any calendars? Kin I have one of these here olmnicks?"

"Sure, help yourself."

* * *

"How much are your post-cards?"

"Two for five."

"My, you're awful high! I've saw prettier ones for three for five cents!"

* * *

"Say, Hack, let's see your chocolates. How much is that box?"

"A dollar and a half."

"Is that the best you've got?"

"No, here's a nice one for three and a half. Wrap it up for you?"

"No, never mind—I'll come in and look at 'em again."

* * *

"Ten-cent plug eating tobac and a coupla gooda nickel cigars."

* * *

"No, we do not handle hair-nets or rats. You can get them three doors to the left."

* * *

"I would like to see some children's toy books. Have you any paper ones made out of linen cloth?"

"This way, please. No, those are twenty-five cents, not five cents. Paper is expensive, you know."

"I'll take the ten-cent one, thank you."

* * *

"Hello! . . . Yes, this is the drug store. . . . What's that? . . . How much—a nickel's worth? . . . Yes, we can send it up right away."

* * *

"Do you give away those calendars that are hanging up?"

"No, those are fifty cents."

* * *

"Some perfume? What kind?"

"Oh, I'm not particular. That's a pretty box—how much is that?"

"Regular price a dollar—make it ninety

cents. Yes, it's the quintessence, a little stronger than the quadruple extract."

* * *

"No, we have no elephants. Try the ten-cent store two doors west."

* * *

"Have you any Cherry Bark Cough Cure?"

"No, we don't handle it, but we have some-



C. B. Hacking.

thing else just as good. Twenty-five—thank you."

* * *

"What's the best medicine you have for rheumatism?"

"Here's something we make ourselves. We guarantee it to cure or money refunded—thank you."

* * *

"Gimme a match!"

* * *

Query: After having this sort of thing, and much more of it, all day long, I am wondering why I once sat up until the wee small hours, with a green shade over my eyes, trying to figure out the chemical formula for hexamethylenamine, to determine the similarity of the halogens, and to find the antidote for laughing-gas!

Echo answers, Why?

DOLLAR IDEAS

HUSTLING FOR CHRISTMAS TRADE.

Clyde S. Leslie, Ewing, Mo.: I wish to submit an advertising scheme that proved a very successful one last Christmas in gaining holiday trade.

We picked out a bright boy about 15 years of age, one who could sing pretty good; had him learn a few appropriate Christmas rhymes and songs; dressed him up in a suitable Santa Claus costume; put him on a horse and started him out to visit all of the surrounding rural schoolhouses.

After obtaining permission from the teacher—and they never refuse—he would enter, introduce himself as Santa Claus, sing a few songs, speak a few short pieces, and tell the school he was making headquarters at our store, where they could find a large variety of toys of every description and a complete line of holiday goods. After telling the scholars they would find him at our store all of the day preceding Christmas, and asking them to have their parents bring them to town on that day, he would present the teacher, if a lady, with a can of our talcum powder, or if a gentleman, with a dozen lead-pencils.

Any other appropriate or suitable present could of course be substituted. The expense of carrying out this plan was very trivial. It caused no end of comment and proved a trade-winner.

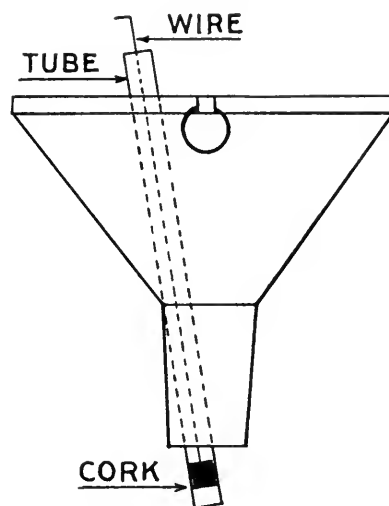
HIS METHOD OF KEEPING THE CASH ACCOUNT.

A. R. McEwen, Calgary, Alberta: Having read with much interest from time to time your articles on different systems which drug-

It is also easy to compare with preceding months. I employ an ordinary minute-book for the purpose and use its double page for each month. The illustration is self-explanatory. It will be readily seen that this statement will show all the money that can possibly be paid out of the store outside of checks and drafts.

A DEVICE FOR FILLING KEGS AND CARBOYS.

C. K. Bushey, Dillsburg, Pa.: In filling kegs, carboys and other receptacles through which the liquid cannot be seen, they often become full before one realizes it, causing a



loss by overflow and entailing extra work. The little device illustrated proves very advantageous.

Have a small tube extending a little beyond the neck and soldered in a funnel. Through this tube insert a light, stiff wire to the lower end of which a cork, smaller in diameter than the inside of the tube, has been attached. At the upper end bend a hook so as to keep the cork resting near the end of the tube.

SEPTEMBER 1, 1910.

DATE.	Rec. on acct.	Cash sales.	Credit sales.	Total daily sales.	Total monthly sales.	Total cash for day.	Total cash for month.	Rec. on acct. for month.	Cash sales for month.	Credit sales for month.	Expense.	Mdse.	Freight and express.	Bank deposit.	Personal.	Balance.
Aug. Sept. 31	5 25	35 00	8 25	88 25	38 25	40 25	40 25	5 25	85 00	8 25	Floor oil 75		P D & Co 1 35	90 00		100 00 30 15

gists have devised for keeping cash accounts, etc., I am submitting a form which I have used for some years. It enables me to tell exactly from day to day how the cash account stands.

When the liquid in the receptacle rises to the level of the cork, it will push the wire up, indicating that it is full. The tube also serves as a vent.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

AN INTERESTING LETTER, CHIEFLY ABOUT SHOW-CARDS.

To the Editors:

Some time ago I noticed a request in your paper for drug-store signs. Quite a few of my show-cards have collected in course of time, and if you still care to have some I will be pleased to send them to you. They are somewhat out of the ordinary. In fact, I am wont to say they are entirely original with me, and since they emanate from one of the "small fry" they might be of interest to a good many of your readers.

I know the general wail is that the "big fellows" are swallowing it all because they have the money to have everything done just so. Well, I am one of those with very small resources. Just seven years ago, after a particularly hard stroke of luck whereby I was left absolutely penniless and with shattered credit, I did what was then termed an exceptionally crazy stunt—I bought another store. It was one of those stores that nobody wanted because the man who owned it had found out, only one month after he had bought it, how badly he had been stung.

He was nearly three years in selling that store. Nobody wanted it, until I came along and paid him his price, viz., \$3500 at 6 per cent interest, *nothing* down. My entire indebtedness amounted to \$4000, figuring the interest in with the capital, and I was to pay up \$75 in notes every month without interest.

How I had to plug away to come out with a family of five children! But I got there! One of the first essentials was: I watched how the big fellows were doing it, and then began to imitate them. It started in with window displays and "crazy signs," as they were called then, and some of these signs are the ones now at your disposal.

At first these signs were not very good, but in course of time I improved them until to-day I can turn out a fairly good specimen, and I insist that most retail druggists can do likewise.

I cut out front pages of the *Saturday Evening Post*, and also ordinary magazine illustrations, and press them into service. They help to make my signs very attractive, and they give life to my legends. They are pasted onto the cardboard and then outlined with black paint, and touched up here and there to bring out the colors better. When the cards are done they have puzzled many a salesman, who has wondered what a great "painter" I was!

In offering you this, I am prompted by a desire to be of actual assistance to some of my colleagues. I know how anxiously I have always waited to see something in the papers that I could imitate, and many good points of information have I gleaned from articles written by men like Pepper, Hynson, Utech, Cooban, yourselves, and many others, so that I almost feel that I owe it to others to let them profit by some of my experience. The only condition I make is that you kindly use my *nom de plume*. If anybody should be interested enough to want more details, I shall be pleased to write him personally, but I do dislike general publicity.

"Ego."

[NOTE BY THE EDITORS.—A considerable number of "Ego's" attractive show-cards are reproduced on page 496 of this issue of the BULLETIN.]

A RATTLING GOOD SUGGESTION: LET US HEAR FROM YOU!

To the Editors:

The writer has been a reader of the BULLETIN for many years, and while enjoying all of it finds special interest in the annual business statements submitted by druggists and analyzed by members of the editorial staff. We believe that much good accrues from this source, and to that end we wish to contribute to the discussion, and at the same time to invite others to do so.

Unfortunately, too many druggists do not know their percentage of expense and its ratio to the sales. Neither do they know what the percentage of profit is, net or gross; whether it is based on the sales or purchases; and they are unfamiliar with all the details that go to show a man what he is actually doing. To figure the percentage of profit on the purchase price, and the percentage of expense on the selling price, would result in a disappointment.

We find a wide range of experience in re-

gard to the percentage of gross profit, from the Texas druggist who submitted a statement in the November BULLETIN, showing a gross profit of more than 43 per cent (we shall refer only to that based on sales), to the man whose insurance experts told him, after the fire, that he had made only 25 per cent.

We should find it exceedingly interesting if a great number of druggists would tell what their gross percentage of profit was, and also their percentage of expense. No names need be used, so that nobody's business secrets would be divulged. Will not the editors of the BULLETIN call for such information?

Now here's the rub—usually: when the books are closed for the year, the profit is not there. It has disappeared! We do more than \$16,000 cash, and we do not sell school books, magazines, paints and oils, wall paper, or anything which swells the volume but reduces the average profit. On the other hand, we have a good prescription trade, a good soda business, have the Rexall agency, and carry a good line of sundries. On all of these items, taken separately, the gross profit ranges from 50 per cent to 75 per cent, cigars and tobacco alone yielding less, and our trade on the latter is not large. Yet the best gross profit we have ever been able to show is 31.25 per cent! We know this is too low. We know it is unsatisfactory, but we cannot solve the problem. What do you suppose the trouble is? What is the experience of others who get full prices?

Theoretically, a druggist who gets full prices, has a good trade on profitable lines, and does no business on less profitable ones, should show a gross profit of 40 per cent. This, while satisfactory, is not unreasonable. What say you all, fellows?

Once a man knows his business and what he can count on, it is merely a matter of adjusting the expense account if the volume cannot be materially increased, although many of us could do both.

"DRUG PROFIT."

P. S.—In one respect we differ from the BULLETIN. We deem freight an expense and not a part of the cost of the goods.

[NOTE BY THE EDITORS.—A good suggestion is contained in this letter, and we hope our readers will act upon it freely. It is this: that they tell us what are their percentage of expense and percentage of gross profit respectively—both of course being calculated on the sales. If we could collect a large amount of data

showing how these figures average with druggists all over the country it would be most helpful as indicating what might be and what ought to be accomplished. Please let us hear from you. We shall be glad to keep the names confidential, so that no objection need be felt to divulging the facts on the score of publicity.]

RULES IN COMPOUNDING PRESCRIPTIONS.

To the Editors:

Having read with great interest Mr. Scott's letter on compounding rules in the October BULLETIN, and your request for contributions along this line, I wish to submit a few ideas on the subject. During some fifteen years' experience I have always found the following procedure in the dispensing of prescriptions to make for safety, and I would offer it to others:

1. Decipher your prescription and be perfectly able to read it intelligently in order that you may check unusual doses; notice any incompatibilities, and discover other things that need attention. For instance, some new drug may be called for which is not kept in stock, or perhaps some unusual infusion or ointment must be made. All these details are most important and should be noticed for the simple reason that the time it takes to fill and despatch a prescription is most essential.

2. Having satisfied yourself that you have what the prescription calls for in stock, the next point is to number and date the prescription. Then write your label.

3. In the case of a mixture being called for, select the bottle and cork, and then test the capacity of the bottle with a reliable graduate, as prescription bottles are by no means always accurate. This I may say is an important point which is too often overlooked.

4. As to the order of putting in the ingredients, this may be left to the ability of the dispenser, but I have always found it a wise plan to leave potent poisons to the last—such things as fluidextract of aconite and diluted hydrocyanic acid.

5. When all the ingredients are in the bottle, test your memory and see if you can recall them without reading the prescription.

6. Before affixing your label check the prescription over again, thus assuring yourself that the directions are correct.

7. With regard to the wrapping and finishing, too much attention cannot be paid to this part of the work. I have always found it satisfactory to seal prescription packages, not

only for the sake of neatness, but also to assure the patient that the medicine has not been tampered with in coming from the store.

Being systematic and methodical, a dispenser will soon acquire this general routine. Then mistakes will become an impossibility.

EDWARD H. GRIFFITHS.

Canora, Sask., Canada.

A PERCENTAGE PROBLEM.

To the Editors:

A statement was made in the November BULLETIN, page 482, in answer to a query sent in by "J. K.," as to how we estimate liquor ferri chloridi to contain 29 per cent of anhydrous salt, corresponding to not less than 10 per cent of iron.

Your correspondent proved the point that 29 per cent salt equaled 10 per cent of iron, but he has the wrong view regarding the 29 per cent. He neglected to consider that in nearly all chemical reactions the success of our efforts in the points of yield and cost of manufacturing depends upon the more expensive ingredient. Therefore, instead of trying to figure from iron he should have figured from HCl.

The first step is as he states. We make ferrous chloride first from HCl and iron, and as our aim is to get all the ferrous chloride we can, we use an excess of iron, which is then filtered out. By molecular weights we find that for every 146 parts of hydrochloric acid we obtain 253.2 parts of ferrous chloride, according to the reaction of Fe_2 plus 4HCl equals 2FeCl_2 plus 2H_2 . Then as we use 420 grammes of 31.9 per cent hydrochloric acid, or 133.98 grammes of absolute hydrochloric acid, by proportion we find $146 : 133.98 :: 253.2 : X$, X equals 232.44 grammes.

Our second step consists in oxidizing the FeCl_2 to FeCl_3 by HNO_3 , and to supply the chlorine we use more hydrochloric acid. In this case we use an excess of hydrochloric acid for two reasons: first, that all our ferrous chloride may be changed to ferric chloride and also to have an excess of hydrochloric acid, so that when we heat to drive off HNO_3 our iron will not precipitate as the oxychloride. By molecular weights we find that for every $126 \frac{6}{10}$ parts of ferrous chloride we get $162 \frac{1}{10}$ part of ferric chloride. As we have $232 \frac{44}{100}$ grammes of ferrous chloride to start with, our proportion will be $126 \frac{6}{10} :$

$232.44 :: 162 \frac{1}{10} : X$ or X equals 297 plus grammes of ferrous chloride. Having 297 grammes in 1000 grammes our per cent will be 29.7. The U. S. P. directs not less than 29 per cent, giving some allowance for errors of manipulation and the personal element by different operators.

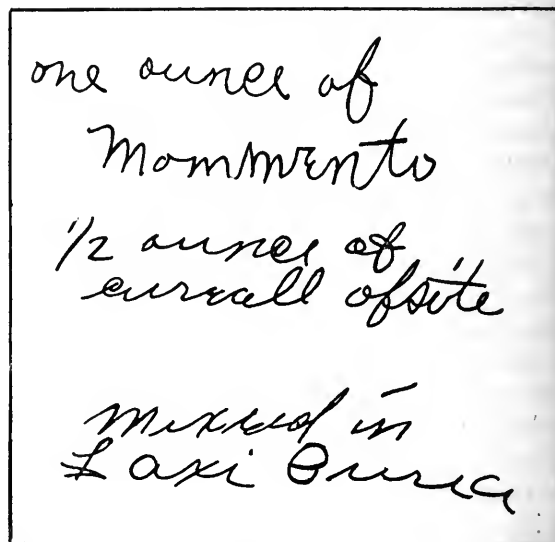
For the reason that we use an excess of iron in one place and an excess of hydrochloric acid in another, we can use neither entirely as a basis for our calculations.

A CONTRIBUTOR.

IS IT WORTH TWO DOLLARS?

To the Editors:

I am sending you a recipe which a grafter has been selling the farmers in this vicinity at \$2 each. It is supposed to be a guaranteed



one ounce of
Momminto
 $\frac{1}{2}$ ounce of
surrall of soda
mixed in
Laxi Ounce

cure for hog cholera. We have not been able to make out what is wanted, and I wish you would kindly publish the recipe in the BULLETIN for the interest and entertainment of your readers.

FRANK D. KRIEBS.

Beresford, S. D.

THE "GOOD CITIZEN" AND LIQUOR.

To the Editors:

The enclosed clipping from a recent issue of *The Saturday Evening Post* just about strikes the nail on the head in my opinion:

GOOD PEOPLE AND LIQUOR LAWS.

Good people frequently are the most insidious and inveterate foes of liquor laws. They cannot understand why a statute designed to lessen the evils of in-

temperance should apply to them when everybody knows they are respectable, temperate, law-abiding, and debt-paying citizens. Estimable Mrs. A. requires half a pint of brandy for perfectly innocent culinary purposes. When the druggist declines to supply her, except upon a physician's prescription, her feelings are outraged. Does the druggist think that she—wife of John Henry A., mother of three children, and president of the Dorcas Society—would purchase brandy for bacchanalian purposes? Deacon B., who has voted no-license for thirty years and who knows perfectly well what the law requires, takes in the same indignant spirit the druggist's refusal to sell him alcohol to bathe his hurt shoulder with. The law, he thinks, was made for old red-nosed Bill Jones, and the druggist seems to regard him as being in Bill's class. There is the still larger number of most respectable citizens who cannot see why their occasional and moderate desires for a little spirituous consolation should be denied because disreputable people get drunk. Good people constantly tempt the druggist to break the law for them. Sometimes they punish refusal to break it by a withdrawal of their patronage, thereby putting a premium on the illicit selling of liquor.

Any good citizen who applies for liquor contrary to the provisions of the law is a most efficient enemy of temperance legislation; but hardly any American citizen in good standing will believe that any law applies to him personally until a policeman enforces the point by hitting him over the head.

I am very glad to see this evidence of interest in the subject by the press outside of the pharmaceutical journals. Personally, I think that the "good citizen" who tempts the druggist to sell liquor illegally is the worst criminal of the two, and I should like to see the law punish him as such. W. F. M.

THE DEATH BENEFIT IDEA.

To the Editors:

In the August number of the BULLETIN there appeared a letter from Wilhelm Bode-mann proposing a druggists' death benefit association, but there has been nothing on it in any subsequent issues. I believe this idea is too important to be dropped, and if I could do anything to help it along, I should be only too glad to do so.

In this county there is a Farmer's Mutual Fire Insurance Company which is working on the same plan, and the plan is entirely satisfactory. It would seem to me that there should be no trouble in getting 500 or 1000 members. This would yield a neat income and would not be a hardship to any one. A small membership fee would show good-will and provide for the expense of stationery, after which there

would be no expense to any one until there was a death.

Would not the BULLETIN be a good starting point for something of this sort? Let us hear from other druggists on this subject.

Crown Point, Ind.

JOHN C. ENDRESS.

NO RUBBER GOODS TAKEN BACK!

To the Editors:

I have been very much annoyed in the past by having customers bring back rubber goods and request their exchange for something else—either another style of a rubber article or perhaps something else entirely different. To

Notice!

This rubber article will under no consideration be exchanged. If it should prove defective it will be replaced. Rubber goods come in contact generally with parts that are most liable to be affected with the more unpleasant contagious and infectious diseases. For your own protection you should be assured that you are receiving an entirely new and sanitary article when you purchase rubber goods of any kind.

In case of complaint return this slip with the article.

Mr. 191 ..

Art. \$..

K. G. AYERS, - Druggist

THE NYAL STORE

Perryville. ✕ ✕ Ohio

avoid this trouble I had slips printed some time ago, and a specimen slip I am submitting in this letter. One of these slips is inserted in every package of rubber goods leaving our counter. The slips are doing their work, and I thought possibly they might solve the problem for some other druggist. What do you think of them?

J. G. AYERS.

Perryville, Ohio.

BASHAM'S MIXTURE.

To the Editors:

I notice in your November issue among "Dollar Ideas" a formula for making solution of ammonium acetate for Basham's mixture.

While recently engaged in hospital service I was often called upon to dispense this popular mixture and adopted a formula which goes a little further than that of Mr. Schwartz. It is a very convenient and satisfactory method for quick dispensing. Mr. Schwartz's formula

contains more acid than the U. S. P. calls for.
I prepare three solutions as follows:

Solution "A."

Ammonium carbonate.....50 grammes.
Distilled water.....500 Cc.

Solution "B."

Acetic acid 36% or equivalent....159.5 Cc.
Distilled water, q. s.....500 Cc.

Solution "C."

Acetic acid 36% (or equivalent
quantity)19.3 Cc.
Glycerin240 Cc.
Aromatic elixir240 Cc.
Tincture of ferric chloride.....80 Cc.
Distilled water, enough to make...1000 Cc.

Equal parts of solutions A and B, when mixed, give the U. S. P. liquor ammonii acetatis, and this when mixed with an equal part of solution C gives the U. S. P. Basham's mixture. In other words, take 1 part each of solutions A and B and two parts of solution C.

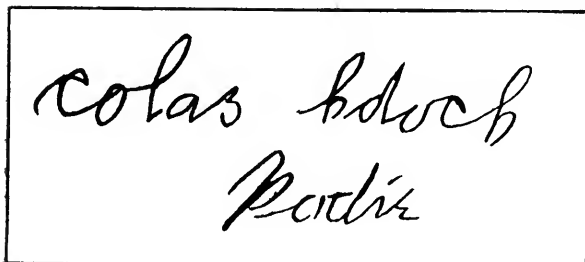
ERNEST R. JONES, Pharm.D.

Detroit, Mich.

SPELLING IS HARD WORK!

To the Editors:

Here is a Chinese puzzle for some of our fellow druggists to decipher. We found upon



further investigation that our patron wanted Kohler's Headache Powders, but who would have guessed it?

Oh, you BULLETIN! How could we ever keep house without you?

Maywood, Ill.

WAKEFIELDS' INC.

GLASS PESTLES RECOMMENDED.

To the Editors:

Permit me to comment upon the progressiveness (?) of Mr. Henderson of Lynn, Mass., as portrayed in the "Dollar Ideas" department of the October BULLETIN, page 431, on the subject of resetting handles in pestles.

Instead of spending about thirty minutes' time, and tearing open a new package of gauze or spilling some of the Canadian turpentine in mending an old-fashioned pestle which will still be old and unsanitary when mended, it will be found more profitable to throw the whole away and invest the small sum of five cents in a new glass pestle. Of course the larger ones vary in price according to size, but numbers 2, 4, and 6, which are most frequently used, cost only five, ten, and fifteen cents. I therefore suggest the adoption of the glass pestle.

DAISY ADELAIDE FRICK.

Audubon, Iowa.

MAKING MONEY IN HIS OPTICAL DEPARTMENT.

To the Editors:

The optical business is one of our paying side-lines. We spend from \$3.00 to \$7.00 a month advertising this department and lay special stress on our method of testing, which is the "fogging" system in connection with the "Mediaometer." Our investment is about \$400, including instruments. Our total sales for September, for instance, amounted to \$129.40. The cost of goods sold was \$34.13. After deducting the general cost of doing business a good net profit still remains.

Newton, Kansas.

JOHN REESE.

To the Editors:

I receive about a dozen drug journals. No bouquets—but the BULLETIN OF PHARMACY gets the first prize! Your journal is the best in the field!

A. G. SPERO, Ph.G.

Brooklyn, N. Y.

* * *

To the Editors:

I feel that I get more for this dollar than any other dollar I spend during the year.

El Dorado, Kansas.

FRED G. BECHTEL.

* * *

To the Editors:

The BULLETIN is the essence of pharmaceutical journalism.

FRANK W. SAAL.

Seville, Ohio.

* * *

To the Editors:

I prize your BULLETIN very much and often refer to old volumes which I have bound.

(Miss) LOU E. PHELPS.

East Smithfield, Pa.

THE SODA FOUNTAIN.

WHY A SODA FOUNTAIN PAYS IN WINTER.

Edward Langan, chief dispenser of the Home Drug Company, Chicago, writing in the *Liquid Dispenser*, tells why hot drinks pay. The reasons are:

1. They add nothing to your rent, light or heat bill.
2. You use the same space and practically the same equipment, and winter demand takes less of your time than the summer does.
3. Hot drink dispensing pays a clear profit of 6 to 8 cents on every 10-cent drink—just about twice as much as cold drinks.
4. No money is paid out for ice, ice-cream, or electric fans.
5. Nothing goes to waste or sours, nor is it necessary to fuss with the carbonator or waste time making syrups.

6. The serving of hot beverages keeps alive the demand for cold sodas—even in below-zero weather.

I am not speaking from the manufacturer's or salesman's point of view, but from practical experience of dispensing both winter and summer for the past ten years, at the busy fountain of Chicago's loop district. I have also kept in touch with the smaller fountains outside the loop, and find that they reap equally handsome profits from the winter sales of hot drinks.

EASIER, SIMPLER, LESS KICKING.

Managers and owners all agree that it is much easier to please their trade in winter than in the summer when people are hot and ill-tempered.

The manager of one of the largest fountains in Chicago claims he acquires more steady patronage in one winter than in three summers; and it is not by dispensing fancy drinks, but just plain hot drinks, served right.

There is the whole secret in dispensing hot drinks—have them right. It is not hard; so easy, in fact, that it is surprising that Chicago is not overrun with year-around fountains, instead of the scarcity that now prevails.

MEN'S TRADE PAYS BEST.

For the past four years I have been employed at a drug-store fountain that catered almost exclusively to the professional and business men, and I find they form the best trade possible.

They want a good hot drink neatly and quickly served, that nourishes as well as refreshes, telling us quickly what they wish; never changing their mind; are gone in a minute; but back again the next day, if not sooner, often bringing in a friend that is soon converted to a good customer.

PROFITABLE NOONDAY TRADE.

We find that a great number of men do not eat a noonday lunch, but appreciate a hot egg malted milk or some such drink to "hold over" till dinner.

We have built up a large noonday trade just this way, and it is getting better every day.

REPLACING ALCOHOLIC DRINKS.

Business men realize that a cup of chocolate or bouillon warms up one far better than alcoholic drinks, and does not lead to the third or fourth glass, thereby interfering with their business.

GOOD FORMULAS FOR HOT DRINKS.

Look over the following formulas and see how simple it is to dispense drinks—drinks that have pleased all Chicago and its countless visitors, and are being used at the leading soda fountains in the city.

Use any good brand of stock that has standard strength. Use a double compartment urn, water-bath with milk reservoir, either earthenware or porcelain. Do not keep chocolate in the urn, but just the milk, a small amount at a time, and do not let it brown.

HOT CHOCOLATE PASTE.

Satisfaction Dutch process cocoa, 24 ounces.
Hot water, 1 pint.

Rub the cocoa smooth with water; add 3 quarts of milk and boil again till thick; strain and put in quart bottles. Use 1 tablespoonful of the paste to cup of hot milk and top with whipped cream.

Serve with wafers.

TOMATO BOUILLON.

Use one-half ounce "Liquid" Tomato Bouillon to a 7-ounce cup hot water; add celery; a dash of paprika and whipped cream if desired.

CLAM BOUILLON.

Use three-quarter ounces "Liquid" or Burnham's Clam Bouillon to a 7-ounce cup; draw two-thirds full of hot water; fill with hot milk; add a touch of butter; top off with whipped cream and sprinkle with celery and paprika.

HOT EGG CHOCOLATE.

Shake egg and one-half ounce milk well; strain off scum of egg; pour it into 10-ounce glass; add tablespoon Diamond brand cocoa paste; fill with hot milk; top off with whipped cream and serve with wafers.

HOT EGG COFFEE.

Shake egg in one-half ounce of cream; strain into ten-ounce tall glass; add two lumps of sugar; fill with hot coffee; top off with whipped cream.

HOT MALTED MILK.

One tablespoonful Borden's or Horlick's malted milk; add one teaspoonful whipped cream and one ounce water; mix well; fill cup with hot milk and a spoonful of whipped cream. This can be sweetened with vanilla or chocolate if desired.

HOT EGG MALTED MILK.

One egg, one tablespoonful malted milk, one ounce milk; shake well; strain into glass and fill with hot milk. Top off with whipped cream. Flavor can be added if desired.

HOT COFFEE.

Can be easily served at the fountain by using a good French drip coffee-pot that costs about \$1.50 for pint size, or by using one of the standard makes of percolators.

Use one tablespoon of powdered coffee and serve with whipped cream and wafers.

USE OF STEAM TABLE OR DOUBLE BOILER.

A very satisfactory way of serving chicken or tomato bouillon is to use a steam table or double boiler. Use a good soup stock, thinned with water and milk. A touch of soda bicarbonate keeps the milk from curdling.

The profit is a little less, but the drink is much richer. The difference will soon be returned by increased sales.

BOOSTING THE BUSINESS.

How do we get the trade?

By using well-printed window signs, placed where the shivering crowds can easily see them, and by being as particular with a 5-cent drink as a 15-cent or 20-cent one.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Molecules from Many Minds.—

The Japanese and Chinese use paper in place of skin for gold-beating.

Olive oil is bleached with tannic acid, 1 to 5 per cent of the latter being used. Citric acid is also employed in some cases.

Radium emanation has been found to stimulate the growth and function of yeast, and is being introduced into brewing. A superior flavor in beer, etc., is claimed by its use.

Peppermint oil has been obtained from specially cultivated plants which contained 78 to 84 per cent of menthol.

The odor of oil of cade is much reduced by heating and stirring, and it is claimed that the oil thus treated possesses all of the therapeutic activity of the original oil.

Absolute alcohol can be made from 95-per-cent alcohol by digesting for a short time with anhydrous sodium sulphide. The sulphide can be entirely recovered after distilling off the alcohol.

The lower algæ are capable of reducing calcium sulphate in water to sulphide and even form hydrogen sulphide. This is supposed to be the source of hydrogen sulphide in mineral waters.

Seal oil is proposed as a substitute for cod-liver oil. It is claimed that seal oil is just as valuable as a nutrient, but has less taste and smell. Chemically the two oils are almost identical.

Carbonated water is found to dissolve both tin and lead, and a tin-topped siphon containing as little as 0.5 per cent of lead is attacked by the water, both tin and lead being dissolved.

Quinine shows a strong fluorescence in solutions containing sulphuric, nitric, phosphoric, and hydrofluoric acids, moderate fluorescence with tartaric and acetic acids, and weak fluorescence with hydrobromic and hydrochloric acids.

The atmosphere over the ocean has a more constant composition than over the land. It contains less of radium emanation, but is more uniform in this regard.

The present production of tungsten ores is 6000 tons annually, but this could be increased to 20,000 tons annually in the present workings.

Sugar beets are being used in Austria for the production of alcohol, and the mash is fermented with wine yeast. Beer yeast gives less alcohol.

Sea-water varies considerably in composition, containing from 1 per cent of saline matter in the Baltic to 5 per cent in the Red Sea. The mean composition of ocean water is 3.5 of saline matter.

By distillation *in vacuo* alcohol of 99 per cent has been obtained without the use of dehydrating agents. The alcohol separates from water better under reduced pressure.

Mercury appears to have a peculiar affinity for cancerous tissues, and it is suggested that the therapeutic use of mercury may predispose to cancer.

German chemists claim that the variation in the amount of radium emanation in the atmosphere is the cause of nervousness displayed by many persons just before a storm.

Colloidal ferric hydroxide is stated to precipitate invertase and diastase completely, without destroying their activity.

Quinine is found to have a strong bactericidal effect on the dysentery bacillus, being effective in dilutions of 1 to 1000.

A decoction of horse-chestnuts and sarsaparilla with a little lime-juice is a patented remedy for rheumatism in England. What's the matter with the horse-chestnut in the pocket?

Whether a product is a by-product or a buy-product depends upon U.

About Radium.—

Chemically radium is an element with a definite atomic weight and with specific chemical and physical properties. It differs from other elements, however, in having unstable atoms. Each second a small fraction of radium atoms disintegrates with explosive violence, and breaks up into three different substances or forms of energy. The first, alpha rays, consist of the rare gas helium, and are projected with a velocity of about 10,000 miles per second. The second, beta rays, consist of electrons, having an estimated size of about 1/1800 the size of the hydrogen atom, and they travel twice or more as fast as the alpha rays. The third, gamma rays, are exceedingly penetrating and make their way through lead a foot in thickness; they are little understood as yet. This disintegration is accompanied by heat sufficient to melt an equal weight of ice in forty minutes, and the elimination of heat is continuous. The amount of heat given out in the course of a year is very large, yet there is no sensible alteration of the radium itself or in its rate of radiation. The energy evolved is also enormous, and is calculated as about ten million times as much as the most violent explosive that can be prepared. It is estimated that a pound of the gas would, in a month, emit an amount of energy equal to 60,000 horse-power days, if it could be controlled. One gramme of radium yields 0.6 cubic millimeter of pure emanation, hence a pound of it is impossible at one time. The alpha rays themselves also disintegrate, but more rapidly. Half of them are transformed in a little less than four days. Radium is half transformed in about 4000 years.—
PROF. E. RUTHERFORD, in *Jour. Soc. Chem. Ind.*

About Saponins.—

Professor Kobert says that 60 families of plants yield saponins, and that saponin is obtained from all parts of some plants. Chemically he divides them into acid saponins, soluble only in alkali solutions, and neutral saponins, soluble in water or a solution of plant extractive. They are mostly amorphous bodies forming colloidal solutions, and make very stable emulsions. They have detergent properties in solutions as weak as 1 to 10,000, but their action on the blood is distinct in some cases in dilutions 1 to 100,000. The latter strength will kill fish. Therapeutically they differ almost as much as do alkaloids, some being

highly poisonous and some scarcely at all so. They are used as diuretics, heart stimulants, and anthelmintics, and are also employed as emulsifiers, detergents, and as foam-producers in drinks. He regards neutral guaiacum-bark saponin as the least poisonous and states that this is "certainly harmless in the amounts necessary" in drinks. He ascribes the action of ginseng to saponin, and suggests that this class of remedies has not yet been appreciated.

Nothing New!—

The idea that all matter may have a common origin dates back 2500 years. Democritus and Leucippus were the real discoverers of the atomic theory, but the times were not propitious for its use as a working hypothesis. It was not therefore until revived by Gassendi and adopted by Dalton that it became acceptable to science.—PROFESSOR SANG, in *Popular Science Monthly*.

Molecular Molecules.—

A French chemist says that the water of crystallization in salts exists usually as double or triple molecules or as combinations of these. This explains why when dehydrated the salts lose water in groups of two or three molecules. Single molecules may also exist, either alone or in combination with double or triple molecules.

The Hot Process for Syrup.—

N. Deerr says that a neutral solution of cane-sugar can be heated to 110° C. without undergoing any inversion, and if slightly alkaline it will stand higher temperatures. Solutions containing chlorides, bromides, iodides, nitrates or sulphates are inverted rapidly above 105° C., even in alkaline solution. Acid solutions are inverted at ordinary temperatures, faster when heated.

The Saints Preserve Us!—

Liquid air is recommended for preserving parts of bodies for chemical examination, since at -190° putrefaction does not take place, the tissues are not altered, and volatile substances are not lost. But the Egyptian mummy has preservation schemes beaten to a frazzle. Netolizky has found out what the Egyptians ate 5000 to 6000 years ago by examining mummies. One woman was found to have eaten 20 different kinds of fish shortly before death! Then she died!

In Spite of the Artificial.—

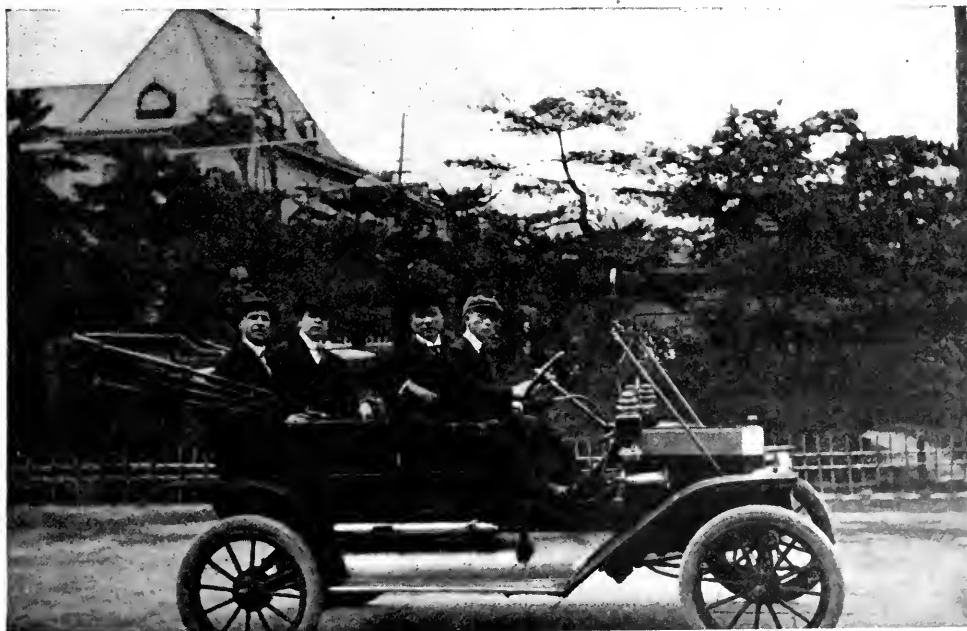
Fifty years ago natural musk was sold for twice its weight in silver. Now it brings 12 to 13 times its weight. The lightest colored musk is considered the best, and it is graded as "golden yellow," "clear-red brown," and "deep-red brown." It is largely adulterated and is sold in Thibet without examination. The adulteration sometimes reaches to 75 per cent of the package.

Gasoline in Chunks.—

Solidified gasoline, made by dissolving 2 per cent of stearic acid in gasoline, then saponifying the acid with the required quantity of an alcoholic solution of sodium hydroxide, is claimed to be a safe and more economical method of using gasoline in motor cars, etc. A slight warming liberates enough gasoline for use, and the soap can be used again.

A Matter of Teeth?—

German chemists state that beef extract in health adds little or nothing to the nutrient properties of foods, but in cases of insufficient nutrition it aids in the assimilation of foods. Under favorable conditions about two-thirds of the energy of beef extract is made use of by the system.



PARKE, DAVIS & CO. AROUND THE WORLD.—This picture was recently taken in front of the Imperial Hotel in Tokio, Japan. The Japanese gentleman in the front seat is Matasaku Shiohara, who has charge of Parke, Davis & Co.'s interests in Japan. His two guests in the rear seat are James E. Bartlett, manager of the Chicago branch of Parke, Davis & Co., and Dr. S. S. Coleman, manager of the branch at Bombay, India.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Metal Polishes.

D. P.—We do not know the composition of the proprietary products which you mention. But here are several formulas for metal polish:

This is recommended for machinery by the chemical laboratory of the industrial museum of Batavia:

- | | |
|--|-----------|
| (1) Oil of turpentine..... | 15 parts. |
| Oil of stearine..... | 25 parts. |
| Jewelers' red | 25 parts. |
| Animal charcoal, of superior quality.... | 45 parts. |

Alcohol is added to this mixture in such a quantity as to render it almost liquid, and then by means of a brush it is put on those parts that are to be polished. When the alcohol has dried, the polish remaining is rubbed with a mixture of 45 parts of animal charcoal and 25 parts jewelers' red. The rubbed parts will become clean and bright.

- | | |
|--------------------------------|------------|
| (2) White petroleum jelly..... | 90 pounds. |
| Kieselguhr | 30 pounds. |
| Refined paraffin wax..... | 10 pounds. |
| Refined chalk or whiting..... | 10 pounds. |
| Sodium hyposulphite | 8 pounds. |

Melt the wax and jelly, stir in the other ingredients, and grind.

It is an undecided point as to whether a scented paste is better than one without perfume. The latter is added merely to hide the nasty smell of some of the greases used, and it is not very nice to have spoons, etc., smelling, even tasting, of mirbane, so perhaps citronelle is best for this purpose. It is likely to be more pure. The dose of scent is usually at the rate of 4 ounces to the hundredweight.

This is a cleanser as well as a polisher:

- | | |
|-------------------------------|----------|
| (3) Prepared chalk | 2 parts. |
| Water of ammonia..... | 2 parts. |
| Water sufficient to make..... | 8 parts. |

The ammonia saponifies the grease usually present.

It must be pointed out that the alkali present makes this preparation somewhat undesirable to handle, as it will affect the skin if allowed too free contact.

The density of the liquid might be increased by the addition of soap. The solid would then remain longer in suspension.

Face Lotion.

C. D. C. wants several formulas for a face lotion.

J. T. Harbold (*Proc. Amer. Phar. Assoc.*, 55, 136) says that a non-sticky, non-greasy, non-irritating preparation of perfect consistence is thus prepared: Tragacanth, 2 drachms; quince seed, 15 drachms; borax, 6 drachms; boric acid, 8 drachms; glycerin, 10 ounces; alcohol, 90-per-cent, 10 ounces; sodium benzoate, 3

drachms; boiling water, 80 fluidounces. Make a homogeneous mucilage with the tragacanth and 32 fluidounces of the water. Infuse the quince seeds in boiling water for four hours, stirring frequently, and then strain. Dissolve the borax, boric acid, and sodium benzoate in the rest of the hot water; add the perfume and glycerin dissolved in the alcohol, and finally incorporate, a little at a time, the two mucilages which have been previously mixed. Then agitate thoroughly to obtain a homogeneous mixture.

Mr. Ernest Melling, of Bryn, England, has had much success with what he calls "Hazoma Cream." The formula is as follows:

- | | |
|---------------------------|--------------------------|
| Powdered tragacanth..... | 9 drachms and 20 grains. |
| Glycerin | 8 fluidounces. |
| Alcohol | 5 fluidounces. |
| Tincture of benzoin..... | 1 fluidounce. |
| Oil of neroli..... | 30 minims. |
| Oil of bergamot..... | 80 minims. |
| Oil of geranium..... | 80 minims. |
| Distilled water..... | 48 fluidounces. |
| Oil of sweet almonds..... | 2 fluidounces. |

Rub the tragacanth with the alcohol, add the benzoin, then the glycerin and the oils, and lastly the water.

This is one of Mr. Melling's best specialties, and, if nicely made, is claimed by him to be an elegant cream. He uses a label of bronze green.

For other formulas, consult the annual indexes in the December issues of the BULLETIN.

An Effective Liquid Soap.

J. F. K. wants a formula for liquid soap such as is used in liquid soap dispensers over wash-stands in hotels.

The following formula suggested by M. I. Wilbert some years ago is made from purified cottonseed oil and will not cost more than fifty cents a gallon in fair quantities and make a satisfactory product. Try it:

- | | |
|--|----------|
| Sodium hydrate | 40 Gm. |
| Potassium hydrate | 40 Gm. |
| Cottonseed oil | 500 Cc. |
| Alcohol | 250 Cc. |
| Distilled water, a sufficient quantity to make | 2500 Cc. |

In a suitable container, preferably a glass-stoppered bottle, dissolve the potassium hydrate and the sodium hydrate in 250 Cc. of distilled water, add the alcohol, and then add the cottonseed oil in three or four portions, shaking vigorously after each addition. Continue to agitate the mixture occasionally, until saponification has been completed. Then add the remaining portion of distilled water and mix.

The only precautions that are at all necessary are to use the U. S. P. grade of ingredients, and to be sure that saponification is complete before adding the remaining portions of the distilled water. The water used must be absolutely free from soluble salts of the alkaline earths or the heavy metals, and for this reason should be, preferably, freshly distilled.

The resulting preparation not being official, the pharmacist is at liberty to modify the formula to suit his own individual taste or the preference of his customers. The soap can, of course, be readily made more alkaline, and it can also be made with an appreciably smaller quantity of the alkali.

For general use as a toilet soap it would of course be necessary to give it some distinctive odor. This can best be accomplished by replacing a portion of the water with distilled extract of witch-hazel, rose-water, or orange-flower water, or by adding the necessary perfume, spirit or essential oils to suit the individual taste

or need. A satisfactory odor might be secured by adding the mixture of essential oils used as the flavoring ingredients of the alkaline antiseptic of the N. F. or the liquid antiseptic of the U. S. P.

Greaseless "Peroxide" Cream.

L. C. H.—A contributor to *The Druggists Circular* recommends the following formulas for a greaseless "peroxide" cream:

1. First make an emulsion of quince seed, $\frac{1}{2}$ ounce, and boiling water 12 ounces. When cold strain until it is clear. Then heat and melt in it stearic acid 16 ounces. In a separate container dissolve borax 90 grains and sodium carbonate 4 drachms in water 20 ounces. Then add this solution to the emulsion of stearic acid very slowly and with constant stirring. When the reaction is complete, take out of the water-bath, and when quite cool add water 2 pints, hydrogen dioxide 4 ounces, perfume enough, and alcohol 1 ounce. Stir together well and continue stirring until cold.

- (2) Stearic acid.....3 ounces.
Sodium carbonate..... $2\frac{1}{2}$ drachms.
Anhydrous wool-fat.....4 drachms.
Glycerin3 fluidounces.
Borax1 drachm.
Solution of hydrogen peroxide....4 fluidrachms.
Water16 fluidounces.
Perfume.....a sufficient quantity.

The hydrogen peroxide is added when the mass is setting.

Removing Walnut Stains from the Fingers.

E. A. L. writes: "We have had many requests of late for something that will remove walnut stains from the hands. Since we have been unable to find a walnut stain remover, will you be kind enough to suggest one?"

We can find no such preparation in the literature. We suggest for trial a more or less dilute solution of chlorinated lime that has been rendered acid with acetic acid. Most people are content to let the stain wear off.

Here is a method used to clean very soiled hands that may be of use in hastening the disappearance of black walnut stains: In the morning wash the hands in warm water, using a stiff brush, and apply glycerin. Repeat the application two or three times during the day, washing and brushing an hour or so afterwards, or apply a warm solution of soda or potash, and wash in warm water, using a stiff brush as before. Finally rub the hands with pumice or infusorial earth. There are soaps made especially for this purpose, similar to those for use on woodwork, etc., in which infusorial earth or similar matter is incorporated.

Silvering Mirrors.

M. P. M.—The following method of silvering mirrors has been published before:

Solution No. 1 is composed as follows: To 8 ounces of distilled water, brought to a boil, add 12 grains of silver nitrate and 12 grains of Rochelle salts. Let it come to a boil for six or seven minutes; then cool and filter.

Solution No. 2 is made as follows: Take 8 ounces of distilled water, and into a small quantity poured into

a tumbler put 19 grains of silver nitrate. Stir well until dissolved. Then add several drops of 26% ammonia until the solution becomes clear. Add 16 grains more of nitrate of silver, stirring well until dissolved. Add the balance of distilled water and filter. The filtering must be done through a glass funnel, in which the filter paper is placed. The solution must be stirred with a glass rod. Keep the solutions in separate bottles marked No. 1 and No. 2.

Directions for silvering: Clean the glass with ammonia and wipe with a wet chamois. Then take half and half of the two solutions in a graduating glass, stirring well with a glass rod. Pour the contents on the middle of the glass to be silvered. It will spread over the surface of itself if the glass is laid flat. Leave it until the solution precipitates.

Embalming Fluid.

C. D. C.—The following is said to be the formula now adopted by prominent manufacturers in Berlin, according as it is to be used for injecting or immersing bodies:

	For injecting.	For immersing.
Arsenious acid	16 grammes.	12 grammes.
Sodium chloride	80 grammes.	60 grammes.
Potassium sulphate	200 grammes.	150 grammes.
Potassium nitrate	25 grammes.	18 grammes.
Potassium carbonate	15 grammes.	10 grammes.
Water	20 liters.	10 liters.
Glycerin	4 liters.	4 liters.
Wood naphtha	$\frac{3}{4}$ liter.	$\frac{3}{4}$ liter.

Success in the use of any embalming fluid depends largely on manipulation, an important part of the process being the thorough removal of fluid from the circulating system before undertaking the injection of the solution. The following formula has been used:

Solution of zinc chloride (U. S. P.)...	1 gallon.
Solution of sodium chloride (6 ounces to the pint).....	6 pints.
Solution of mercuric chloride (1 ounce to the pint).....	4 pints.
Alcohol	4 pints.
Carbolic acid (pure).....	8 ounces.
Glycerin	24 fluidounces.

Mix the glycerin and carbolic acid and then all the other ingredients.

This gives a solution of 3 gallons, which is the proper amount for a body weighing 150 pounds.

The following recipe for an embalming fluid is also given:

Formaldehyde	11 pounds.
Glycerin	4 pounds.
Borax	2.5 pounds.
Saltpeter	2.5 pounds.
Boric acid	1 pound.
Eosin (1-per-cent solution).....	1 ounce.
Water, sufficient to make.....	10 gallons.

Dissolve the borax and boric acid in water. Heat and stir to aid the solution. Add the saltpeter. When complete solution is effected, add the glycerin and formaldehyde. Lastly add the eosin.

Multi-color for Show Globes.

M. P. M.—First ascertain the capacity of the bottle and divide by seven, to find the volume of each solution or liquid to be employed. The fluids should, in the order named, be carefully poured down the side of the bottle, held in a slightly inclined position, or through a glass tube inserted into it.

(1) One volume of sulphuric acid c. p., tinted blue with indigo sulphate; (2) one volume of c. p. chloroform; (3) one volume of glycerin, slightly tinted with caramel; (4) one volume of castor oil, colored with alkanet root or alkannin; (5) one volume 40-per-cent

alcohol, slightly tinted with green aniline; (6) one volume of cod-liver oil, containing 1 per cent oil turpentine; (7) one volume of 94-per-cent alcohol, slightly tinted with violet aniline.

The liquids are held in place by force of gravity, and alternate with fluids which are not miscible, so that the strata or layers are clearly defined and do not mingle by diffusion, as is the case when miscible liquids as glycerin and water are brought in direct contact with each other. Perhaps it is necessary to add that the colors suggested should be employed in quantities only sufficient to impart a pronounced tint to the fluids; too deep colors look dead, and detract from the brilliancy of the combination.

Ridding a Cigar Case of Worms.

C. & R. write: "Please tell us the best way to rid a cigar case of the small cigar worms. We have been bothered a great deal with these little pests of late, and as the highest price goods appeal most to them, their destruction has been very expensive."

We have referred your query to Dr. W. O. Hollister, an entomologist, who says:

The cigar worm spoken of is the larva of the cigarette beetle, a small insect which does serious damage to all tobacco products, such as plug tobacco, snuff, cigarettes, and cigars.

The surest way to get rid of the pest, although dangerous, is to fumigate with hydrocyanic acid gas at the rate of 1 ounce potassium cyanide, 2 ounces sulphuric acid, and 4 ounces of water to every 100 cubic feet of space, for twelve hours or over night. The acid should be poured into the water and the cyanide dropped into the liquid in a small paper sack. Great precaution must be used, as the gas is very poisonous to man. The fumigation may be made in the cigar case, if tight and the store closed, or the tobacco goods may be treated in a tight box or room.

This method has been used by the U. S. government in warehouses.

Since chemical students are sometimes poisoned by hydrocyanic acid fumes in the laboratory, it will be seen that much care must be exercised in carrying out the foregoing directions. It might be well to write for details to the Bureau of Entomology, Department of Agriculture, Washington, D. C., before going ahead in a proceeding of such risk and delicacy.

Sticky Fly-paper.

G. B.—Boiled linseed oil stands out as the basis of the popular fly-paper. If any retailer is daring enough to try to manufacture these papers instead of buying them, here is the formula to start with:

Boiled linseed oil.....	6 ounces.
Gum thus.....	1 ounce.
Castor oil.....	2 ounces.

The quantities of the ingredients must vary according to the condition of the linseed oil. It is necessary to have a non-drying base, such as castor oil, in the composition. Petroleum oil is also good, and a slight trace of beef suet is not an objection, because animal matter of any kind helps to draw the flies. A good quality of parchment paper must be used, and the composition spread upon it while hot with a stiff brush. The paper should then be folded and the edges turned over, or the composition should be prevented from exuding by some other means.

Use the paper already sized as it comes from the mills on which to spread the mixture. Or spread the mixture on paper sized with glue. Paper is sized by

dipping it into a weak solution of glue or gelatin and letting it dry. This prevents the oils from penetrating through the pores or interstices.

A Satisfactory Method for Detecting Wood Alcohol.

The I. B. S. Co. wants a qualitative test for wood alcohol. The following method is very practical:

To 100 Cc. of aqueous methyl alcohol (or the suspected liquid) in a 200-Cc. distilling flask add from 5 to 8 grammes of chromic acid to oxidize the methyl alcohol to formic aldehyde. Collect 10 Cc. of distillate and test for formaldehyde by the Leach method as follows:

Add about 5 Cc. of the distillate obtained to an equal volume of pure milk in a porcelain casserole and about 10 Cc. of concentrated hydrochloric acid, containing 1 Cc. of 10-per-cent ferric chloride solution to each 500 Cc. of acid. Heat to 80° or 90° C. directly over the gas flame, giving the casserole a rotary motion to break up the curd. A violet coloration indicates formaldehyde derived from the methyl alcohol.

A Bad Mixture.

A. D. Co. submits the following prescription for our comments:

Quinine bisulphate.....	3 drachms.
Muriatic acid.....	2 fluidrachms.
Nitric acid.....	1 fluidrachm.
Iron by hydrogen.....	6 drachms.
Specific tincture of nux vomica...	2 fluidrachms.
Alcohol	1 fluidounce.
Water to make.....	6 fluidounces.

Shake and take a teaspoonful after meals.

This prescription is incompatible. The nitric and muriatic acids react on the iron, producing ferric chloride and liberating gases that blow out the stopper. The mixture is very unsightly regardless of the method of compounding. Allowing the iron to react with the acids in an open vessel before adding the other ingredients does not help much.

Unavoidable Discoloration.

C. J. wants to know what causes the following mixture to turn dark after standing a few days:

Potassium bicarbonate	2 drachms.
Sodium salicylate	2 drachms.
Sodium benzoate	2 drachms.
Sodium succinate	2 drachms.
Water enough to make.....	1 pint.

Ruddimann says that solutions of salicylates in water, particularly if alkaline, become colored red-brown on exposure to air.

Labeling a Compound Solution of Vanillin.

W. F. E. Company asks us how a preparation composed of a compound solution of vanillin and coumarin, with a caramel color, put up under a coined name, should be labeled so as to comply with the pure food laws. They ask further whether it is necessary to state the composition of the product on the label.

A reply to this inquiry involves an examination of the food laws of all the States, which it would require much time to enter upon. We should think, however, that such a preparation sold under a coined name which did not indicate the presence of vanilla, either expressly

or by implication, would conform to all the laws, unless of course there was some actual misstatement upon the label. We know of no State which requires the complete formula to be stated upon the label. In one State, and possibly more, the preparation cannot be sold, however labeled.

Remedy for Chicken Cholera.

C. E. B. submits the following formula for a poultry cholera cure with the request that we tell him how to prepare it. He complains that the mixture is not clear:

Kerosene	1 ½ ounces.
Olive oil	3 ounces.
Carbolic acid	10 drops.

The trouble seems to be due to the fact that the carbolic acid and the oils give a cloudy mixture. He has evidently been using a liquefied carbolic acid containing more or less water, and that is what gives the cloudiness.

If a certain amount of carbolic acid crystals were used instead of carbolic acid liquefied, the phenol would dissolve readily in the oils and give a clear mixture. This could be colored green with chlorophyll or red with alkannin, producing an "elegant" preparation.

Avoiding Precipitation of Salicylic Acid.

W. B. writes: "Will you kindly tell me what is wrong with the enclosed formula, as it crystallized on me several times? The crystals settle to the bottom and the solution is weakened. Have I too much alcohol or not?"

Sodium salicylate	2 pounds.
Resorcin	12 ounces.
Carbolic acid	5 ounces.
Sodium sulphate	12 ounces.
Beta-naphtha	1 ounce.
Salicylic acid	16 ounces.
Thymol pearls	3 ounces.
Glycerin, c. p.	10 ounces.
Alcohol, c. p.	6 gallons.
Water	30 gallons (often use only 20 gallons).

A sample of this mixture after standing several days threw out quite a few long acicular crystals. Tests identify these as salicylic acid. The addition of more alcohol or glycerin will prevent the precipitation.

Preventing Frost on Windows.

J. F. C. wants to know how to prevent windows from frosting. Here are three methods which have been suggested:

(1) As an excellent remedy against the freezing of shop windows, the *Phar. Zeit.* recommends the application of a mixture consisting of 55 grammes of glycerin dissolved in 1 liter of 62-per-cent alcohol, containing, to improve the odor, some oil of amber. As soon as the mixture clarifies it is rubbed over the inner surface of the glass. This treatment, it is claimed, not only prevents the formation of frost, but also stops sweating.

(2) Dissolve 55 grammes of glycerin in 1 liter of alcohol, 63-per-cent, to which a little amber oil is added for scent. As soon as the mixture is limpid, the inside surface of the show window is rubbed with it, using a window chamois or a linen rag, whereby not only the freezing but also the dimming and sweating of the windows is obviated.

(3) To keep frost, etc., off plate-glass windows keep the inside air dry, or inner sash tight, so that the air in window enclosure will be cold, and ventilated from the outside. A partial remedy is to have ventilating openings in the top of the window casing.

D. M. J. asks: "How can you tell a good French briar pipe?" We give it up. Can our readers offer any suggestions?

BOOKS

A MANUAL OF STRUCTURAL BOTANY. An Introductory Text-book for Students of Science and Pharmacy. By Henry H. Rusby, M.D., Professor of Materia Medica in the College of Pharmacy of the City of New York (Columbia University); Pharmacognosist of the United States Department of Agriculture; Member of the Committee for the Revision of the United States Pharmacopoeia since 1890. Octavo, 248 pages, with 599 illustrations. Cloth, \$2.50, net. Lea & Febiger, Philadelphia and New York, 1911.

This book is primarily an introduction to pharmacognosy, and although necessarily condensed is fairly complete and may be suitable as a text-book on structural botany for academic or collegiate students. It will be followed by a companion volume on Commercial Pharmacognosy.

The volume was prepared with special reference to the needs of the first-year student of pharmacy as an introductory work to his second-year work in pharmacognosy.

Vegetable histology and microscopical technique have been omitted from this volume, but the elementary facts of plant physiology in connection with its anatomy have been considered, its object being to teach all that is able to be done in the examination of drugs with the naked eye or with a pocket lens.

A succinct account of the morphology and function of the root, stem, leaf, flower, and fruit is given, supplemented with 599 figures scattered through the text, which are generally very excellent.

The book is convenient in size, neat in appearance, and doubtless will be a welcome and valuable addition to the working library not only of the student of botany but also to the practicing pharmacist. The eminent position of the author of this work and the unquestioned authority of his dictum in pharmacognosy should insure its wide acceptance by the pharmaceutical profession.

O. A. FARWELL.

DORLAND'S AMERICAN POCKET MEDICAL DICTIONARY.

This book, now in its seventh edition, contains the pronunciation and definition of all the principal terms used in medicine and the kindred sciences, including dentistry, veterinary medicine, nursing, etc. Over 60 extensive tables are also given. It is published by the W. B. Saunders Company of Philadelphia. There are 610 pages, gold edged. The dictionary is of pocket size, beautifully printed, and bound in flexible red leather. The price is \$1.25 net.

ONE day an eight-year-old girl, who had been taught to report her misdeeds promptly, sought her mother with an aspect of grief denoting great penitence.

"I broke a brick in the fireplace," the youngster explained, between sobs.

"Well, that isn't beyond remedy," smiled the parent, "but how on earth, child, did you do it?"

"I was pounding it with father's watch."—*Lippincott's*.

—THE—

BULLETIN OF PHARMACY

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THE MONTH'S HISTORY

ECHO OF WILEY-RUSBY INCIDENT.

Of sensational developments in the drug trade there have been none of late. Everybody must have been too busy buying Christmas presents—or in collecting the money necessary for the fulfilment of this annual habit. The incidents and events which have kept us on the *qui vive* for the last few months have now become matters of history, although there *was* an echo last month of the Wiley-Rusby episode.

Dr. Rusby finally got very weary of having his good name impugned, and he brought suit for libel against one Alvin H. Warth. Warth, it seems, is a chemist who lives at Stapleton, on Staten Island, and he is charged with writing a letter to Secretary Wilson several months ago reiterating some of the accusations against Dr. Rusby which were brought

out in the congressional investigation. The letter, however, was not printed at the time, but only turned up in the newspapers several months later.

Dr. Rusby thought it was a good chance to hit a head that was plainly in sight, so he went after Warth and began a prosecution for criminal libel. Warth says he didn't write the letter, and Secretary Wilson's presence in court may be necessary before the fact is proved. Anyway, even if he did write it, the general opinion is that he was merely acting as a stool-pigeon for somebody else. In other words, some people who disliked Wiley and Rusby were using this means of venting their spleen under cover.

It strikes us, however, that Dr. Rusby has taken the matter rather too seriously. Nobody who knows him believes any of the silly intimations and innuendoes which have been uttered regarding his work for the government. If he tries to run down every fool rumor, he will find himself spending money and time in an effort to clear a reputation which doesn't need any clearing. People who are in the government service will apparently have to do what politicians very early learn—ignore and forget a whole lot of things!

* * *

CONCENTRATE LOCAL ASSOCIATIONS!

The proposed *Journal of the American Pharmaceutical Association* is, we believe, to make its appearance during the present month, but in the meantime Editor James H. Beal is beginning to use the constructive wisdom which caused him to be elected to his position at the Boston meeting last August. In a recent issue of the old "Bulletin of the A. Ph. A." he had an editorial pointing out the directions in which the local branches might be developed in the interests of the organization as a whole.

Inasmuch, he declared, as the A. Ph. A. is the one all-embracing body in which every branch of the drug trade is represented, every city of any size should have a local branch

acting as a sort of parent to other local drug associations. Thus, for instance, the local retail druggists' association, so-called, might well be the commercial section of the A. Ph. A. branch, and other bodies, if there were such, could similarly be brought under the same ægis. The meetings could be held on the same or on alternate evenings, but the policy of concentration would make for more effective and united work.

The get-together meetings with physicians, which have become such regular features of association work during the last few years, could be handled much more efficiently by such an amalgamation. And in cities where there was a college of pharmacy, it would be advantageous to so arrange the meetings as to encourage the attendance of senior students. This would swell the size of the meetings, increase their interest, and tend to make association workers of the young men who are to be the pharmacists of to-morrow. An important factor in successful branch work, too, is to keep in touch with the local newspapers by sending them announcements of reports of the meetings—and in a number of ways, readily apparent to the thoughtful mind, such a policy of concentration as Professor Beal outlines commends itself most heartily. It is worth thinking about seriously.

* * *

**THE NEW
"CONFERENCE"
IN NEW YORK.**

The extent to which power is frittered away by the division of pharmacists into too many associations is well illustrated in Greater New York. There are probably eight or ten organizations in that city. They vary in the number of members from 75 to perhaps more than 500. Quite frequently they are at loggerheads with one another, and always they fail to work with skill and effectiveness when something important needs to be done—like heading off inimical legislation or modifying the decisions or regulations issued by the city board of health.

This truth has been realized for years, and now we find that some sort of a Conference has been or will be organized. This is to be a delegate body, consisting of three members from each of the local associations. A constitution is being voted upon and approved by the various bodies. The proposed Conference can act promptly in time of emergency—that is, if the delegate associations won't be vested

with too much power as autonomous and independent states. Our friends, the druggists of Greater New York, have never shown any great capacity to get together and to stay together, but we trust that the new movement promises something definite in this direction.

Work for the Conference to do is immediately at hand. The New York and New Jersey Telephone Company announced some time ago that it had reduced druggists' commissions on outgoing calls from 20 to 10 per cent. A meeting of the Conference was at once called and it was voted to ask the company for a 30 per cent commission. In other cities commissions of 30 and even 40 per cent are paid, and it is in situations of this kind that a united drug trade can get what it wants. At the meeting of the Conference C. O. Bigelow showed that it cost the average druggist about 25 per cent to do business, whereas he would be getting 10 per cent under the new commission offered by the telephone company! We hope the druggists of New York will fight and fight hard.

* * *

**RISKY
SPECULATION.**

From a recent copy of the
"Bulletin of the National
Association of Credit Men"

we find that the merchants of Canada have been calling the attention of retailers in the western provinces to the "unfairness of speculating in real estate with money which rightfully belongs to those who have supplied them with goods, this speculation being made possible through the holding up of payments overdue." The retailers are being urged to dispose of such real estate as does not legitimately belong to their business, where, that is, the speculation in it means that their interests are spread out too thinly to be available in case of unforeseen conditions which might tend to contract credit.

This sort of thing has been experienced in a somewhat lesser degree in our own country, notably in Oregon, Washington, and California. In rapidly developing regions there is always a temptation on the part of business men to spread out their capital beyond the point where they can give it personal attention, and this is often done at the expense of their creditors. If a druggist, for instance, has the means with which to make wise investments, he is of course justified in making them. He may be

even justified in going a step further and borrowing the money for the purpose, providing he has ample security. But to indulge in purely speculative enterprises, and to thin out his money so far that he puts himself in great danger in case of reverses, is certainly not excusable except he has ready money enough to pay the bills of the manufacturers and the jobbers when they fall due. Otherwise he is practically using the money which belongs to the latter for himself, and he is in danger of losing his credit rating entirely.

The credit men's organizations can scarcely be blamed for taking up this question and sounding a note of warning. They have to look after their own interests, and on purely selfish grounds alone it pays the average merchant to heed what they tell him. A business man without credit is a man who is greatly crippled.

* * *

"Ph.B." DEGREE IN PHARMACY.

At the last meeting of the Conference of Pharmaceutical Faculties, held in Boston during August, the assertion was made in the address of President J. O. Schlotterbeck that the use of the degrees Ph.D. and Ph.B. in pharmacy were fraudulent and should not longer be tolerated. This point of view was unanimously approved after some discussion. It was repeatedly declared that both degrees have a well-established meaning in educational circles, and that to use them for relatively short courses in pharmacy was entirely without excuse. It ought to be explained, however, that approval was given to the use of the degree of Doctor in Pharmacy, provided the title of "P.D." or "Phar.D." is employed, so that there would be no confusion with the well known "Ph.D.," which of course means Doctor of Philosophy.

We are reminded of this discussion by the receipt of a letter from one of the Middle Western States. The writer is a man who received the degree of Ph.B. from the University of Michigan in 1893. He was given it, of course, after the completion of four years of academic training, and it stood for Bachelor of Philosophy. He tells us, however, that in his section a number of pharmacists have received a degree of Bachelor in Pharmacy instead of Ph.C. or Ph.G., and that the abbreviation used is identical with that belonging to Bachelor of Philosophy, namely,

Ph.B. So general is this custom that he has often been asked, by people who observe his use of Ph.B. after his name, what particular college of pharmacy he graduated from!

This is just the point brought out in Dr. Schlotterbeck's address. "Ph.B." stands for something definite to those who know about university education. It means four years of strict university work, and it can only be used in technical institutions like pharmacy schools fraudulently. "Phar.B." is a different thing—"Phar." is plainly a contraction of pharmacy. But Ph.B. should mean nothing but Bachelor of Philosophy. To try to make it mean Bachelor of Pharmacy is to indulge in ambiguity and fraud.

* * *

ADVANCE YOUR PRICES!

A paper was read before one of the State pharmaceutical associations last summer (we do not recall which particular one it was) in which the thesis was proved that the druggist's profits have not kept pace with the increased cost of living. Quite a collection of statistics was given to point the moral. Now we find that the members of the Chicago Retail Druggists' Association are waking up to the fact that they are even selling certain drugs at the same old figure despite their quite appreciable increase in cost. At a recent meeting of the C. R. D. A., for instance, Mr. Sandkoetter pointed out that a number of drugs had well-nigh doubled or trebled in cost within a few months, and yet they were still being retailed by most druggists at a price based on the former cost. So important does this point seem to be that it was decided to print a series of articles in *C. R. D. A. News*. From the first article in this series we find that:

Oil of Cloves has risen from 90c to \$1.40; Oil of Cubebs, \$2.50 to \$4.50; Oil of Peppermint, \$2.50 to \$3.75; Oil of Spearmint, \$2.50 to \$4.50; Menthol, \$3.00 to \$7.25; Golden Seal Root or Powder, \$2.50 to \$6.50; Fluid Extract of Golden Seal, \$8.00 list to \$16.00 list; Fluid Extract of Ergot, \$3.00 to \$6.00; Codeine Phosphate, \$3.75 to \$6.40 per ounce; Powdered Opium, \$7.25 to \$10.25 per pound; Larkspur Seed, 45c to \$2.00; Fluid Extract of Larkspur, \$3.00 list to \$6.00 list; Buchu Leaves, 90c to \$1.60 per pound.

The wise druggist, of course, should carefully watch fluctuations of this kind and should change his selling prices accordingly. Otherwise he will be losing a lot of money and wondering where it goes.

**A PRESCRIPTION
NO DEFENSE.**

Several times in this journal we have made it plain that a physician who prescribed liquor illegitimately could not hope to escape punishment, and that a druggist who dispensed such a prescription would find that the law did not protect him. This point was very clearly and interestingly brought out in a Pennsylvania case. A druggist and a physician were jointly indicted for conspiracy. They set up in defense that a physician had a perfect right to prescribe whatever he chose for his patient, and that a druggist, acting under the Pennsylvania liquor act, had a right even in dry territory to furnish liquor on a physician's prescription. The judge held, however, that both men had two personalities. The physician, for instance, was a doctor on the one hand, and he was a mere man on the other. He might do certain things as a doctor, discharging the duties of his profession properly, which he might not do as a man. The point in this case was: was he acting as a physician or as a mere citizen?

The judge went on to express himself as follows:

The act of assembly [under which the case was brought] means that a prescription honestly given by a regularly registered physician shall be a perfect protection to a druggist. "You give me a quarter and I will write (in the form of a prescription) an order for you to get a pint of whisky." Is that a prescription given by a regularly registered physician within the meaning of the act of assembly, or is it simply an order given by the *man*, not the *physician*, on a certain drug store to furnish the bearer liquor? You can see the distinction. The act of assembly had a purpose, and it evidently was to allow druggists to sell liquor as a medicine only.

If the physician writes a note to the druggist: "Give this man a quart of liquor," and the druggist takes that order, or so-called prescription, and sells the liquor, knowing that it is a fake prescription, then they are both guilty. If a druggist knows he gets an order from another man advising him to do a certain thing that is criminal, and he does it, he is guilty if he never spoke to the other man at all. He is guilty because he did the act, and the other man is guilty because he advised it.

Fine and imprisonment was the outcome for both men. A second case similar to the foregoing was tried in the Allegheny court, and both the physician and druggist were sentenced to pay a fine of \$250. All of which proves again, that a prescription is no defense either to physician or pharmacist unless it is honestly given and honestly dispensed. It has often

been declared that physicians may violate liquor and narcotic laws with impunity, simply by writing prescriptions, but this is not true.

* * *

**"PATENTS"
STILL SELLING.**

Everybody knows that many magazine assaults on the patent-medicine business have been made during the last decade. So vigorous and so systematic have these been, and so apparently successful, that we should be prepared to believe that the sales of patent medicines had greatly fallen off in the meantime. But what are the facts? The Census Bureau in Washington has recently gotten out a comparative statement showing how the patent-medicine industry compared in 1909 with 1904. The number of establishments had increased from 2777 to 3642. The capital had increased from \$75,607,000 to \$99,942,000. The value of the products had increased from \$117,436,000 to \$141,942,000.

This doesn't look much like a reduction, does it?

Apparently the patent-medicine makers have increased in number, and in the size and scope of their business, quite as much as have manufacturers in other lines of trade. In one respect, however, the conditions in 1909 differed quite materially from those in 1904. The number of salaried officials and clerks increased by 62 per cent, whereas the amount of business done increased by only 21 per cent, and the number of establishments by 31 per cent. In other words, it apparently took more people proportionately to do a given volume of business, and it cost more in the way of advertising and so on. The business was a little harder to get, and had to be gone after more vigorously. This much, then, may perhaps be conceded as the result of the anti-patent medicine crusades.

* * *

**THE PURE
DRUG LAWS.**

The pure food and drug authorities of the different States are getting more and more active every year, and it behooves druggists to stay in out of the wet. Alive to the situation in South Dakota, the Secretary of the State Pharmaceutical Association recently sent the following notice to the members of the organization:

FELLOW PHARMACISTS:

The Secretary is requested by the Board of Pharmacy to urge again, most earnestly, every member of

our Association to be active in complying with the PURE FOOD AND DRUG LAW and the features specified from time to time by Commissioner Cook. We would especially call your attention to the requirement that only U. S. P. Alcohol (Cologne Spirits) should be used in U. S. P. and N. F. preparations. If you do not have the facilities for manufacturing the more potent and official preparations and for knowing that they are up to standard, would advise that you purchase in small quantities from some reliable pharmaceutical manufacturing concern or jobber who will guarantee U. S. P. strength. The additional cost is so small that you cannot afford to do otherwise. Any information you desire relative to standardization will be cheerfully given by Commissioner Cook or the Board of Pharmacy.

One other matter—retail prices have not advanced in proportion to the increased cost of supplies. Not only in our line do we pay more, but this is also true of nearly everything we purchase in general. The Board recommends that an advance be made in the price of prescription work and on all other articles where additional cost is included. Let us purchase only the purest of drugs and chemicals, and then a good reasonable profit no one will deny us. Let the pharmacists get together in every county.

Very respectfully,

F. W. BROWN, President.

E. C. BENT, Secretary.

* * *

THE N. A. R. D. AND PRICE PROTECTION.

The chief subject of importance discussed last month at the mid-winter meeting of the Executive Committee of the N. A. R. D. was price protection. A whole day was devoted to deliberation on this important topic, and those were heard who had particular panaceas to advance. It was finally decided that the Miles-Freeman plan and the Boehm coupon method were perhaps the best available, but that neither in its present form could fill the bill. Mr. Frank H. Freericks, who was called into consultation by the committee in view of the lamentable illness of Judge Errant, argued that these two plans might be combined effectively, chiefly for the purpose of doing away with the bookkeeping required of the jobber by the Miles-Freeman serial numbering method. Mr. Freericks was therefore authorized by the committee to draw up such a plan and to submit it to the committee for consideration. It will then be published in *N. A. R. D. Notes* and thrown open for general discussion. The redeemable coupon feature of the Boehm plan, drafted on to the Miles-Freeman method, will, it is hoped, obviate the necessity of record keeping to which the wholesalers object so strenuously.

THE DEATH BENEFIT IDEA.

Wilhelm Bodemann of Chicago is very much interested in the idea of establishing a coöperative death benefit plan among pharmacists. He has sent us two or three letters on the subject which have appeared in the BULLETIN from time to time, and other druggists have responded with approval. We gave space last month, for instance, to a communication from John C. Endress. It strikes us that the idea is worth developing. The plan would be simply for each member to be assessed 50 cents or \$1.00, say, whenever there was a death, and the amount so collected would be sent to the widow to help defray the funeral and other expenses. Oftentimes the best of men die without leaving very much in the way of money, and four or five hundred dollars, or even less than that, becomes almost a godsend. If a thousand men would go into the scheme, and the assessment were modestly set at 50 cents, this would make \$500—a very tidy sum in cases of emergency. The logical organization to push this thing is the N. A. R. D., and we commend the proposition to Major-General Charles Mylert Carr, soldier, propagandist, and penman-in-chief of the organization.

* * *

A CHANCE TO PROTEST.

Ever since the food and drugs act went into effect, we have heard occasional complaints that important decisions had been made, and bulletins published, before hearings had been granted by the government to affected parties. It has been urged that manufacturers have thus been subjected to much loss of business and reputation without being given any opportunity to defend themselves. Protests have been made in vain, however, until now we find that Secretary Wilson has sanctioned a tentative plan to give those concerned an opportunity to be heard before the final approval and publication of decisions and bulletins. On the face of it, this looks like a very fair proposition, and it is to be hoped that it will work out satisfactorily.

* * *

Arthur A. Pardee, one of the pioneer druggists of Madison, Wisconsin, and one of the old guard who helped organize the N. A. R. D. in St. Louis in 1898, died a few weeks ago as the result of a paralytic stroke.

EDITORIAL

NONE SO BLIND AS THOSE WHO WON'T SEE.

Yes, this is another screed on that shop-worn and hackneyed theme—the Shorter Hour Question. We have discussed it for years from every angle and repeated ourselves the Lord knows how often! At conventions we have listened while others talked about it, and sometimes (in moments of indulgent leisure) we have even read what others besides ourselves have written about it. Time and again our weariness of soul has caused us to threaten never again to talk, or think, or write on the subject—and this *may* be our farewell sermon.

What is our excuse for approaching the topic again? Have we anything *new* to say? No—perhaps not. But there is one conviction which has slowly been forming in our minds during all these years of futile discussion, namely, that the shorter-hour and Sunday-closing question for the druggist is purely an individual question, and that it will never be solved except as the individual solves it for himself.

The love of money may not be the root of all evil, but it is the root of this one. So long as a druggist wants to squeeze every last cent from his business he will keep his store open all night long and all day on the Sabbath. He will hide behind the stock excuse that drugs are needed by the sick at any and all hours, when he knows perfectly well that the legitimate sales of this character after seven or eight o'clock in the evening won't pay the gas bill, and when he realizes thoroughly that the emergency wants of the sick are supplied by the physician from his case. If he is too honest to advance this argument, he will plead the sacred nature of Custom, and say that the public expects drug stores to be open when other shops are closed, shutting his eye to the fact that the public formerly expected the same thing of grocery stores, but quickly adapted itself to a changed situation when the grocers developed self-respect and refused any longer to make slaves of themselves.

Sometimes the druggist will frankly confess the truth and admit that he is after the soda, the candy, and the cigar business which

comes to him in the evening and on Sunday. This is the nub of the question—the very heart of the whole matter. The druggist frankly wants to extract every last cent from the business—and, by the Eternal, he is going to do it! The indignant editorials on the subject, the association papers, the committee reports, the eloquent debates at meetings—these all slide off his back more easily than a duck sheds water. He listens calmly—and then does as he pleases.

We do not flatter ourselves that even this preachment will effect a revolution, but anyway we need the exercise, and we are determined for once to lay bare the essential truth of the matter before we resolve forever after to keep our peace.

This, then, is the core of the situation. The druggist simply wants to make all the money he can, regardless of how much time or energy or effort it requires. In this he is perhaps not unlike others. There are many business men who never rest—who make slaves and drudges of themselves in a mad scramble after wealth. There are many physicians who take every case they can get, and who work all day and all night in an effort to reap as large an income as possible. There are many lawyers who load themselves up with much more than they can accomplish, and who burn the midnight oil in a nerve-racking endeavor to accomplish what three men could scarcely do.

For some years we have personally had two physicians under observation. They are about the same age. Their training and equipment have been nearly alike. They have much the same sort of practice; their reputations are very similar; and in short the conditions which surround them are practically identical.

One of these men has been ceaselessly on the jump; he has slaved in season and out of season; he has often been out all night on troublesome cases; he has denied himself pleasure; he has robbed himself of rest and relaxation; and now at 45 or 50 years he is suffering from a severe breakdown. The other—what of him? He has been just as conscientious a student; he has made himself just as able a practitioner; but he has taken time for his family, for recreation, for pleasure; he has extracted something from life beyond ceaseless toil; he has kept his mind and

his body fresh; and now at the same age he is looking and feeling in the pink of condition with many years of happiness and strength ahead of him.

What does it profit a man who gains money if he lose all the zest of life and health in the process?

The druggist who is in his store until 10 or 11 o'clock at night, and who works all day Sunday—what real pleasure is there for him in this vale of tears? He has no time for his family. He has no time for recreation. He is a stranger to the great out-of-doors which refreshes the spirit of man and sends him back to his work with renewed inspiration. He loses all the sweet richness of life, all the deep friendships, all the real joys. He becomes pale and bloodless and anemic, and even the work to which he dedicates himself so unreservedly loses its pleasure. He doesn't realize that ideas, and the energy to execute them, come only to the man who drops his business cares every day and rests his brain and his body. Thus he defeats his own purpose. He wants to make the most of his business, but in the very effort to do so he makes the least of it.

Does it pay?

The wise druggist is the man who doesn't care what his neighbors do. He doesn't care what custom is. Without waiting for anybody else he closes his store early in the evening. He likewise closes it all day, or nearly all day, on Sunday. He knows there are deeper pleasures than mere money-grubbing. He knows there are some things which money cannot buy nor wealth secure. He realizes that he can only live his life once, and he determines to live it fully and joyously and happily. If it costs him anything, well and good—he is prepared to pay the price. It is worth it. He is going to *live*—whether other people have sense enough to or not.

THREE PRIZE OFFERS FOR BULLETIN READERS!

We have been busy for several weeks making plans for the BULLETIN during the coming year. We do not want to say very much about them now—performance is somewhat better than promise. Suffice it to remark at this time that we have sent out more than 150 personal letters in search of special articles and illustrations of different kinds, and

we honestly believe that as the result of these efforts we shall be able to lay before our readers during 1912 a magazine full of novel, interesting, and helpful things—things you cannot afford and will not desire to miss.

Our chief object in writing this editorial, however, is to say that we are depending upon our readers in general for certain classes of material. We are anxious to solicit their co-operation and assistance, and we are therefore making the following prize offers:

1. We shall pay \$5.00 at once for every accepted article on "My Best Paying Side Line," and we can use quite a number of them!

2. We shall pay \$10.00 for the best article, and \$5.00 for the second best article, on "My Experience in the Sale and Fitting of Trusses." Only the two papers winning prizes can be accepted on this subject.

3. We shall pay \$10.00 for the best, and \$5.00 each for the two next best, formulas for a hair tonic.

So there you are! Now please let us hear from you—the more the merrier. We can say honestly that the material we get from readers of the BULLETIN themselves is highly valued by us. It is always practical, gets right down to brass tacks, and has those money-making elements in which every live druggist is vitally interested.

As for the papers on side-lines, we may say that we are anxious to discuss this subject quite at length during 1912. The fact of it is, competition has gotten so severe in the drug business—and in all lines of trade for that matter—that the resort to side-lines has become a matter of vital necessity with the great rank and file. We want to know what goods energetic druggists have handled with the greatest amount of success—and we want to know what methods they have used in exploiting them. If the lines carried have been out of the ordinary—so much the better. Perhaps we can develop something new in this agitation of the subject. In the meantime let us caution our writers to get right down into the heart of the matter and describe costs, profits, the volume of sale, the advertising methods used, the talking points employed, the display methods utilized, the results manifested in the increase of business, and all of the practical, money-making details of the proposition. Facts—that's what we want!

As for trusses, not every druggist handles them, but some druggists, as we know from observation, have made them one of their most successful lines. They have specialized on them. They have even devoted one or two rooms to the fitting of trusses. Usually where close attention is given to trusses it is easy to work up a very satisfactory and profitable business on them. We want at least two cracking good articles on the subject of trusses, and in these articles we want druggists to tell just how they have gone about the task of building up their trade on the line. Please get right down to the details so that other druggists in other towns can follow the same methods.

It isn't necessary, is it, to say much about our prize offer for hair- tonic formulas? Nearly every druggist puts out a product of this kind under his own label. If you have been proud of your own hair tonic; if you have pushed it to any extent; if you have built it up into a nice seller—then we want to know about it. Give us the formula; tell us what it costs; tell us what it sells for; send along sample advertisements which may have been used to exploit it; and if a carton is used, mail us one of these, too. Ten dollars for the best formula, and \$5.00 each for the two next best.

This is about all—now please get busy and send us a whole lot of contributions under these three heads! We've got a few five- and ten-dollar checks that we are anxious to pass out—they take up a lot of extra room here in the office and we want to get rid of 'em!

REGARDING INFUSION OF DIGITALIS.

While one rarely hears criticism nowadays of the preparation of tinctures by dilution, it is quite customary for the statement to be advanced that infusion of digitalis ought never to be made in this manner, and that it should invariably be prepared direct from the drug. This idea is based on the supposition that water extracts certain principles from digitalis which an alcoholic or hydro-alcoholic menstruum will not extract, and that the peculiar virtue of the infusion over the tincture or fluidextract resides in these qualities. Is this supposition correct?

In this connection an article by C. Focke (*Arch. der Pharm.*, 249, 323) has proved of

considerable interest to us. The author finds that if an infusion of digitalis leaves is prepared in the usual way, and has a strength, say, of 10 per cent, it will contain only about 74 per cent of the active constituents of the drug. A further infusion of the marc will result in the extraction of about 11 per cent more, or in other words it is possible only to extract about 85 per cent of the total activity of the drug with the utmost care. No matter how the infusion is made, or what strength it may be, it is impossible by the ordinary infusion method to extract the total activity of the leaves. Finally—and this is the point we are coming to—the author declares that a fluidextract of digitalis leaves, when made with a 35-per-cent alcoholic menstruum, and when diluted to the strength of an infusion, will be found at least to possess the same activity as an infusion made from the drug itself, or, if anything, to be slightly more active.

In other words, there would seem to be little ground left standing under those pharmaceutical doctrinaires who hold that water extracts one set of active constituents from digitalis leaves, and that alcohol extracts still another and different set of constituents. The plain inference is that the properly selected alcoholic menstruum will exhaust the virtues of the drug, and that when one part of the product so made is diluted to any desired strength needed for an infusion by the use of boiling water, a preparation is obtained which is fully as active as the infusion made in the good old way, if not, indeed, more active.

Is our European friend correct? Is it possible that all this invective hurled at the "non-scientific" druggist for years past has no basis except in the imagination of his critics?

Waiving this point for the present, it is quite apparent that there is a good deal of confusion about the whole digitalis question. At the last meeting of the American Pharmaceutical Association, for instance, a warm discussion developed over the use of alcohol in the infusion of digitalis. Experienced pharmacists like Joseph P. Remington, Charles M. Ford, M. I. Wilbert, Henry P. Hynson and two or three others were absolutely unable to agree on the reason for the addition of alcohol. Some of the speakers

held that it was used purely as a preservative; others insisted that this was all tommyrot, and that it was employed to give flavor and palatability to the infusion; while still others decared that its purpose was to correct the influence of the drug on the stomach.

So there you are! It is quite evident that we don't know everything yet that is to be known about infusion of digitalis, and it might therefore be wise to withhold judgment awaiting a thorough study of the subject.

PROFITS AND EARNINGS

A LEAKING BUSINESS.

A California druggist sends us the following statement of his business with the request that we comment on it:

Inventory Jan. 1, 1910.....	\$ 3,677 37
Inventory Jan. 1, 1911.....	4,200 68
Fixtures after deducting 10 per cent depreciation	1,626 11
Cash sales	19,656 90
Credit sales less \$50.00 for doubtful accounts.	742 94
Cash on hand Jan. 1, 1911.....	618 58
Cash on hand Jan. 1, 1910.....	1,504 55
Note payable	1,600 00
Credit balance with jobber.....	25 00
Purchases	11,187 04
Transportation charges	323 50
Cash discounts	173 49
Personal withdrawals	3,787 39
Expenses	4,816 97

There are two sets of figures that can be drawn from any proper statement of a man's business. One set pertains to assets and liabilities, while the other set applies to his loss and gain. But if you take the difference between net assets at the ends of certain periods, that difference, plus the amount withdrawn for profits, will agree with the profits of the following year.

In 1910 this druggist's assets were \$6988.69. At the end of 1911 his assets were \$5613.31, showing a reduction in assets of \$1375.38. Instead of a gain, there was a loss in assets. The owner either has not reported all the expenses or the amounts submitted representing assets are incorrect, being too small. He may have been robbed. He hasn't the goods. It would be well to see whether the sale tickets agree with the bank account. It

would pay our correspondent to have his books audited and know where he is at.

Here are our figures:

ASSETS AND LIABILITIES.		
	1910	1911
Fixtures	\$1,806 77	\$1,626 11
Inventory	3,677 37	4,200 68
Accounts receivable		25 00
		742 94
Cash	1,504 55	618 58
	\$6,988 69	\$7,213 31
Note payable		1,600 00
Present worth	\$6,988 69	\$5,613 31
		6,988 69
Loss, 1911.....		\$1,375 38

The assets ought to be \$6996.83, as may be seen from the following figures:

Assets, 1910	\$6,988 69
Profits, 1911	3,795 53
	\$10,784 22
Personal withdrawal	3,787 39
1911 assets should be.....	\$6,996 83
Assets according to statement...	5,613 31
	\$1,383 52 short.

Our friend is shy \$1383.52. He had better get busy and see what the trouble is. We take into account everything reported spent.

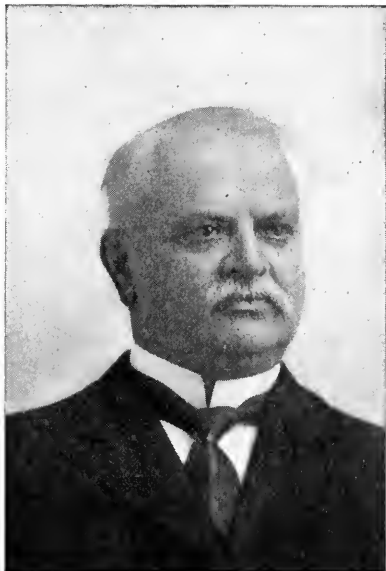
PROFIT AND LOSS, 1910.	
Cost of merchandise sold.....	\$10,813 74
Purchases	\$11,187 04
Transportation	323 50
	\$11,510 54
Less for cash discount earned.....	173 49
	\$11,337 05
Less for gain in inventory, 1910 over 1909	523 31
	\$10,813 74
Expense	\$ 4,816 97
Depreciation, 10 per cent on fixtures.....	180 66
Depreciation, on accounts receivable to cover doubtful debts	50 00
	\$15,861 37
Cash sales	19,656 90
Year's profit	\$3,795 53
Personal withdrawals	3,787 39
Balance of 1911 profit remaining in business	\$8 14

It is evident therefore that our California friend ought to have a profit of \$8.14 instead of suffering a loss of over a thousand dollars.

THE HALL OF FAME

DEATH OF DR. MUIR.

The death of Dr. William Muir, of Brooklyn, removes one of the sturdy and courageous figures in the drug trade. Without polish or ornamentation, his convention speeches



DR. WILLIAM MUIR.

bristling with inaccuracies and infelicities, he nevertheless convinced everybody of his rugged honesty of character and his great sincerity of motive. He was always to be found fighting for the right as he saw it, and for years and years he was the leading representative of the drug trade in New York State in looking after legislative matters at Albany.

The somewhat astonishing success of the Brooklyn College of Pharmacy, too, can be largely traced to the initiative, the determination, and the thick-and-thin loyalty of Dr. Muir. The feat performed by this institution in erecting a new building at considerable cost, in paying for it within a surprisingly few years, and in burning the mortgage in a spectacular and dramatic manner, aroused a good deal of admiration. Dr. Muir was the leading spirit behind the college, as he was the leading spirit also behind the parent of the college—the Kings County Pharmaceutical Society.

He was a strong figure generally in all

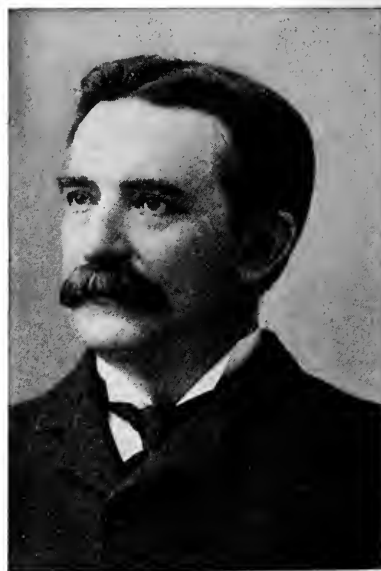
matters touching on local and State pharmacy. He served one or two terms as president of the State Association. He was a member of the various boards of pharmacy for a considerable period. He was always in the thick of every fight, and among other things it may be pointed out that he was one of the leaders who carried the graduation prerequisite bill in New York State through to a successful culmination some years ago. In performing this achievement he did little less than usher in a new era in the educational development of the calling.

Dr. Muir was 61 years old and should have been vouchsafed many more years of useful service. He had, however, some heart trouble which had caused his intimate friends considerable worry for a number of years. Returning from his summer home at Lake Dunmore, Vt., last September, he had been confined to his Brooklyn home ever since. He had retired from active business a number of years before, but had never ceased to devote himself with single-hearted loyalty to the betterment of pharmacy.

Dr. Muir will be missed!

DEATH OF CHARLES E. DOHME.

While the death of Mr. Dohme had been expected for some time, it was none the less



CHARLES E. DOHME.

a shock to the drug trade of the country. He had long been a man held in high estimation in all branches of the trade. One of the

founders of the house of Sharp & Dohme, he had distinguished himself in that industry, and he was so conspicuous in the work of the American Pharmaceutical Association that he had been elected to the presidency in addition to many other offices of lower rank. When the Pharmacopœial Convention was incorporated ten or twelve years ago, he was elected a member of the Board of Trustees and was subsequently made chairman. Mr. Dohme was always a man of generous impulses and of decided charm of manner.* His health had been gradually failing him for several years, so much so that he had practically withdrawn from business a long time since.

A DRUGGIST HIGHLY HONORED.

We are presenting this month the portrait of a pharmacist attired in the unusual splen-



C. H. PATTERSON.

dor and dignity of a 33d degree Mason. As everybody knows who is familiar with the Masonic fraternity, the 33d degree is purely appointive; only a very few members ever attain it; and the honor is therefore one of great distinction. Our portrait shows Charles H. Patterson, a druggist of Jackson, Mich.,

who was crowned with the 33d degree at Saratoga Springs last September. Mr. Patterson is the only druggist in the State of Michigan to carry this honor, and possibly the only one in the United States. If there are any others, the BULLETIN would be very glad to hear from them.

Mr. Patterson is only 37 years old. His record of achievements and honors in the Masonic fraternity is quite impressive. He was made a Master Mason August 12, 1897, in Jackson Lodge No. 17, F. and A. M. He is a Past Master, Past High Priest, Past Thrice Illustrious Master, and Past Eminent Commander. He is a member of Moslem Temple, A. A. O. N. M. S., and a member of Michigan Sovereign Consistory, A. A. S. R., 32d degree. He is Past Grand Master of the Grand Council of Royal and Selected Masters of Michigan, and Grand Sword Bearer of the Grand Commandery of Knights Templar of Michigan.

Treasury Decision 32035 of the United States Court of Customs Appeals has defined a chemical compound to be "not simply a mingling of components, but a combination of them resulting in their destruction as distinct entities, and in the development by chemical reaction of a new substance possessing properties radically different from those of its constituent elements." "The word mixture [on the other hand] implies that the corporeal integrity, the separate chemical nature, and individual properties of the mixed ingredients have been preserved." This is in accordance with the well-known nomenclature of chemistry.

* * *

Friends of Judge Joseph W. Errant have been pleased to know that the Judge has so far recovered that he and Mrs. Errant have been able to go to California to spend the remainder of the winter in that more agreeable climate.

* * *

The St. Paul Drug Club of St. Paul, Minnesota, has recently been organized with a charter membership of 96. The purpose is, of course, social in nature, and it is hoped to establish permanent club quarters later on. H. Reitzke is president of the club.



J. M. Bickford, of Sterling, Ill., built this cottage on the shores of Torch Lake in Michigan last spring, and spent a month there during the summer with his family. The fish stories he told afterward were little less than startling



Here we have Mr. Bickford with his wife and two daughters on the porch of the cottage. After spending a month in this delightful retreat Mr. Bickford wrote us that "It is like pulling teeth to go back to work again"



This is a winter view of the home of Professor L. E. Sayre, of Lawrence, Kansas, Dean of the School of Pharmacy of the University of Kansas.



This picture suggests the pleasant home life of the Sayres, and will be much appreciated by the numerous friends of the Professor and his wife.



James S. Gleghorn, a druggist of Waynesburg, Pa., is here seen taking a joy-ride with his wife and mother. Some druggists know how to enjoy themselves.



The bowered retreat here shown represents the delightful home of Ernest Berger, of Tampa, Fla. Mr. Berger is president of the State Board of Pharmacy.



These three representatives of the drug trade went deer hunting in the Adirondacks last October, and here they are seen having a Delmonico repast far from the madding crowd. Beans seem to be the staple article of diet.



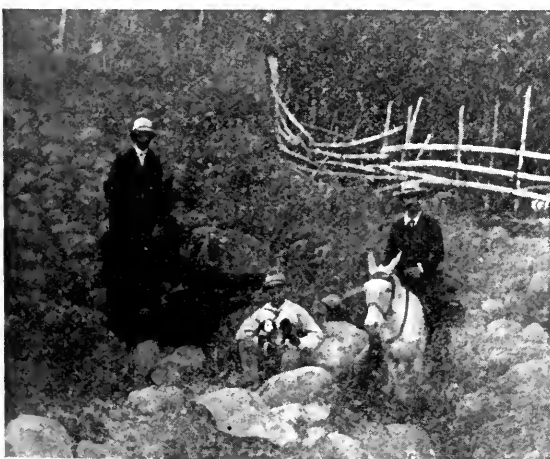
This picture shows the three guardsmen again. In the center is Wm. B. Myers, manager of the Raeden Pharmacy, Cedarhurst, L. I., while the other two figures are Charles Ogden and William Kaufmann, Long Island representatives of Parke, Davis & Co.



The three valiant hunters are now resting in camp. Ogden in the center is cleaning his gun with Euthymol, and Kaufmann is making a pretense of chopping wood.



"The last drop" is being squeezed out, and the proceeding is being watched with a great deal of anxiety. One of the guides sits at the left of the picture.



This picture shows how a traveling salesman in Colombia, Central America, gets from town to town. The figure on the left is P. R. Blanco, one of the traveling representatives of Parke, Davis & Co.



Here we have another photograph of Mr. Blanco, who has temporarily found a somewhat better strip of road. Most of the traveling in Colombia is done on mule-back, as these pictures indicate.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

There have been a good many instances chronicled of the success of men in building up great mercantile institutions. Some of these have been notable drug-store enterprises. It is not uncommon to read of the development of these larger achievements, but it is the story of the moderate success, the success possible to the average man, that does not often get told.

The big successes look impossible to the small dealer. He says: "Oh yes, that's all right, but my store is small, my town is small, my capital is small. I can't be a Riker-Jaynes or an Evans. I've got to dig out a living right here in this town, and the things those big fellows have done won't help me any."

Well, this is to be a story of a moderate success—of a success such as the average druggist can achieve. Since it is autobiographical it will of necessity contain a good many first personal pronouns, and it will probably sound rather egotistical in spots, but I am going to say right here that I realize that there is mighty little in the story to be egotistical about because whatever the success has amounted to, the chances missed, the things left undone, the opportunities allowed to slip past, have amounted to more, and any man might have done better than I under similar circumstances without possessing any exceptional qualifications.—FRANK FARRINGTON.

CHAPTER I.

BEGINNING AT THE BOTTOM.

Most fellows, before they get out of high school, have some idea of what they want to do, what they want to be. I did. I wanted to be, or at least I thought I wanted to be, a civil engineer.

But like most fellows, I have found that what I thought I wanted at sixteen or eighteen I would not have had at any price ten years later. If I had succeeded in getting a civil engineering education I would probably have ended as a section hand, because whatever my head may be for Cimicifuga Racemosa or Opodeldoc, it is certainly not strong for logarithms.

FALLING INTO THE DRUG BUSINESS.

Anyway, a man who owned the oldest and poorest drug store in our town owed my father quite a bunch of money, and as soon

as I finished at the academy in June I was handed a second-hand dispensatory and invited to read it through, because, so they said, some day I might have a chance to be a druggist.

All the summer and all the fall I pored over that big, uninteresting book, usually with some small but much more interesting book inside of it, until at last the day came when the man who owned the drug store had to give up and father took it off his hands.

I hadn't really any time to think whether I wanted to be a druggist or not. I was not asked. And anyway I don't remember that I cared particularly. There was no money to send me to college, and I didn't see why I couldn't have a pretty good time working at the drug business—for my father.

Father did not stay in the store. He had other work. A nice old physician, who was also a druggist because he had been in the business when the pharmacy law was first

*Copyright, 1912, by Frank Farrington.

adopted, made the store his office, and he and I ran or tried to run the business—except the buying, which was done by my father, with our recommendations.

You know what kind of a store this was—old-fashioned front with small panes of glass—wooden steps and platform clear across the front, making a first-class place for idlers to idle—dingy paint and paper inside—show-cases on one side with tops that lifted up to give entrance—show-cases on the other side that had been nickel-plated in their day—prescription desk that was possessed of a pair of scales sensitive to a grain or two (sometimes, depending upon the weather)—weights that weighed what they were marked, more or less—running water only in the cellar, reached by a trap-door through the floor back of the counter.

There was no awning. It wasn't needed, because there was nothing in the windows that the sunlight would injure, and then, anyway, awnings cost money, and that store had not had any money spent upon it in many a moon.

The inventory showed a stock of about \$1500, much of which was as unsalable as last year's birds' nests.

\$15.00 A BIG DAY!

For a few years we hung on without creating any great commotion in local business circles. There were other drug stores, and the population of the town was (and is) less than 2000. Some days we did as much as three dollars in cash receipts. We didn't do any credit business, and it was a big day when the sales ran up to fifteen dollars.

The old doctor who started with us was not in line with progressive methods, and a good pharmacist was finally gotten to instruct me in the technical details and to supervise my studies—for it was ordained that I should learn the business without going to a college of pharmacy.

Whether a kind fate impelled the Board of Pharmacy (one member of which was the owner of one of the competing stores in my town) to ask questions to which I knew the answers, or whether I learned something about the drug trade in spite of youthful preferences for having a good time, I am not sure, but at all events, when my four years of experience were up, and I went before the

board, I passed the examination, though to be sure the member from my town took pains afterward to intimate to me that he saw to it that everything was all right.

It was not long after this that my father's financial affairs assumed a stormy aspect, and since the plan was then for me to take the business as soon as I could swing it, it was decided that the sooner I took it, the better. It was turned over to me for an inventory of about \$2500, and I assumed obligations of my father's to the amount paid for the business. His credit being still good, and his name being behind my own, I had no trouble in establishing credit relations with our whole-



A snapshot of Mr. Farrington taken behind the prescription desk when the sales were \$10 a day.

sale houses, and while I did not have a cent to pay down in cash for the business, I did assume enough responsibility then to start a better financial system. I found it possible to save money when it became necessary.

My salary had not been exactly munificent while working as a clerk, and naturally my savings could not have been great. I received \$1.50 a week and board the first year, then \$2, and later \$2.50 and board until I was licensed, when I was paid \$5 and board, which by comparison looked pretty good.

EARLY NEWSPAPER ADVERTISING.

Even before taking the store myself I had begun to put into practice some advertising

ideas, and the accompanying specimens of newspaper ads. show what we did in the beginning to attract business. Our newspaper space was about three inches, single column, and that did not give room to say a great deal, but I always tried to make what I did say pointed and readable.

After all, that is what makes a good advertisement. Say no more than the public will be willing to read, and say it in such a way that after reading it a point will be left impressed on the mind.

It will be noticed that these small advertisements said almost too little, and that some of them were not much more than a catchy heading. They omitted prices, too, in a way that a few years of experience showed me



Mr. Farrington's store in the early days.

was poor policy. Still, they did get read, and the emphasis placed upon the "money-back" idea was the means of interesting the public.

ADOPTED THE MONEY-BACK PRINCIPLE.

This plan of refunding people's money whenever they have been dissatisfied I have followed steadily. It means that whenever the buyer thinks I ought to give him back his money I do so without any ifs or ands. Of course, there are some goods that we do not guarantee, but these are sold with that fact distinctly understood and mentioned at the time. Under such conditions no fair-minded person will expect a refund, and I have found that humanity in the long run is decidedly fair-minded.

There are occasional mistakes. It is not entirely rare for a customer to come in and

want money back on goods bought at some other store. I have even given back the money in such a case, though usually there is no trouble in proving to the customer that the article came from somewhere else.

The instance referred to was where a customer brought back a defective hot-water bottle and asked for a new one in exchange. The article was of a brand we had never had in the store, but even after my explanations were made the customer still insisted that there was no doubt the bottle had come from us, so I gave her a new one. In about six months she came in and paid for the new bottle, saying that she had just found the one that came from our store and that the boxes had got mixed, etc. The woman was perfectly honest and the family were customers I could ill afford to lose. It paid me to make the exchange, even if the goods *did* come from some other store.

THE IMPORTANCE OF PERSONAL SERVICE.

It is in the matter of personal service to customers that the small druggist has the big advantage over the chain stores. When customers are few and far between there is time for the proprietor to give each one his own individual attention.

People like this kind of service, especially in a drug store. They want their drugs *right*, and oftentimes if they are waited upon by a young clerk or by a new clerk, they do not feel sure they are getting just the same kind they had the last time.

Then, too, there is nothing like the attention of the proprietor himself to straighten out misunderstandings, and to prevent them. Clerks rarely have enough patience. If some one comes in and asks, as one of my customers did, for "Fly-bite food for babies," the clerk is apt to say, "We haven't got any," and then go behind the prescription case and laugh, rather than try to find out in a tactful manner just what is wanted and then sell it.

BEGINS SPECIAL SALES.

I had not been running the business very long before I began to want to have some kind of a special sale. I noticed that the city stores were all the time advertising something special, and I seized upon the occasion of a "teachers' institute," a good sized convention of school teachers, as my opportunity.

The night before the institute opened I distributed all over town a lot of dodgers, part of which were headed "Found" and part "Lost," and each went on to tell of a special sale of stationery for that week with a 5 per cent (!) discount.

Needless to say, there was no great rush for that discount! I displayed the goods well and put up big cards in the windows, but I don't remember that any sales were made as a result of the plan—and yet I have no doubt that there were a good many people reminded of the store and drawn there for stationery some time because of that "sale," so while it was something of a joke on me, still it was a start in the right direction and its evident failure did not discourage me.

In this connection I might add that subsequent experiences and trials of various plans, when the annual school teachers' institute is held, have proved that about the only line that will interest them much at that time is

cheap books. Stationery, confectionery, perfumery, toilet specialties and all the rest of the drug and stationery articles they pass by unheeded, but put a line of bargain books into the window and they will all stop and look them over.

I made it a point from the first to have something special doing whenever anything was scheduled that might bring a few or many people into town. In a small village the big celebrations are few and far between, but every little while there is something that brings a few people in from outside points, and they are pretty apt to wander along the main business street and look at the store windows and make a few purchases.

The principle of going after the transient trade in a small place is the same as in the city. The profit that comes from such business is so much "velvet."

The expenses of handling my business were pretty light in those days, and it is well they

<p>Do You Like That Kind?</p> <p>The odor of a cheap perfume is much like a flavoring extract. Our perfumes are of the best quality.</p> <p>Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>	<p>Buggy Bugs.</p> <p>If you are troubled by any kind of insects—rush for some of our genuine Persian Insect Powder. It's 50c. per lb. Farrington's Drug Store.</p> <p>YOUR MONEY BACK IF YOU WANT IT.</p>	<p>Your Money</p> <p>back if you want it. That's the principal on which we do business, whether you purchase pens or paregoric, pills or peppermint.</p> <p>Farrington's Drug Store.</p>	<p>We keep Sponges.</p> <p>The little barber sponges, The middle-sized bath sponges, and The big wagon sponges, at Farrington's Drug Store. Arabian Remedies too.</p> <p>(YOUR MONEY BACK IF YOU WANT IT.)</p>	<p>School Books Right.</p> <p>We are prepared to supply school books, new and second-hand, for the coming year. If you have old books that we can use come and exchange them. Farrington's Drug Store.</p> <p>(YOUR MONEY BACK IF YOU WANT IT.)</p>
<p>In Selecting a Tooth</p> <p>powder, one cannot be too careful to get something free from injurious ingredients. You can get pure preparations—powder, paste or liquid—at Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>	<p>Muscle Brace and Blood.</p> <p>That's beef, iron and wine. This is the month for it. For this month we will sell the large size for 50c. a bottle. Farrington's Drug Store.</p> <p>(YOUR MONEY BACK IF YOU WANT IT.)</p>	<p>WE SAY</p> <p>Your money back if you want it, and we mean just that. Farrington's Drug Store.</p>	<p>Glauber's Salt</p> <p>(HORSE SALTS)</p> <p>every farmer buys them occasionally. We sell 1 lb. for 5c. 5 lbs. for 20c. 10 lbs. for 35c. Farrington's Drug Store.</p> <p>(YOUR MONEY BACK IF YOU WANT IT.)</p>	<p>Books!</p> <p>You are a reader. Next week we shall offer some book bargains. Come and see if we have what you want. Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>
<p>The Blind Can't See Far,</p> <p>but they know that Farrington's Drug Store is the place for writing paper, whether you want one sheet or one hundred.</p> <p>(Your money back if you want it.)</p>	<p>Economy Gone Wrong.</p> <p>Economizing on your health is poor economy. Economize on diamonds if you want to, but get the best drugs that you can buy. You will find them at Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>	<p>Is It Pure!</p> <p>Are you sure you are getting pure cream tartar? We are selling the best that money can buy for 50c. lb. Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>	<p>Keep on Coughing</p> <p>if you want to, but you can stop by trying some cough medicine from Farrington's Drug Store.</p> <p>(YOUR MONEY BACK IF YOU WANT IT.)</p>	<p>Most People Dye</p> <p>some every Spring. You can get everything in the line of dye stuffs, at Farrington's Drug Store.</p> <p>(Your money back if you want it.)</p>

A group of the small newspaper ads. written by Mr. Farrington when he began to push things. They are pretty good, but he tells how he learned a few things about writing ads. later on.

were, for a business whose receipts average perhaps ten dollars a day some of the time does not do well if handicapped by heavy expenses. In the first June that I owned the store I took in \$281.47.

A WORD TO CLERKS.

In those days I was able to run the store without any clerk, doing all the work myself and calling my father in usually to stay while I went to my meals. There were plenty of days at that when I had abundant time to sit down back of the prescription case and read when I might better have been cleaning up the store or the stock. It took me a good while to awake to a realization of my opportunities, just as it does a good many boys. If there is one thing I would like to impress upon the youngster's mind as he starts out in the drug business, it is that he can accomplish wonders if he will try.

Just so long as the clerk is satisfied with being a clerk, and doing his work as it comes along, just so long he will advance only as his gain in actual years of experience advances him.

Take your own case—yes, you! You think you are giving your employer good service, and probably you are. You are doing what he hired you to do, and to that extent you are a successful clerk. I have no object in urging you to do more for your employer's sake. It is up to him to see that you earn your money and enough more to pay him a profit upon your services.

But on your own account—what do you want to do? What do you want to become? Are you doing anything to-day to fit yourself for that? If you want to own a store of your own, are you studying the methods of store management used by the men who are succeeding? Are you reading the trade journals and filing away in a book of clippings or in your head the items in them that will be valuable some day?

USING THE DRUG JOURNALS.

One of the first things I did was to look up the matter of trade papers and to subscribe to some of them, and then I took pains to read those papers because I believed that the people who got them out drew upon the best pharmaceutical brains in the country to make their papers worth reading.

Just as soon as I heard of the BULLETIN

OF PHARMACY I subscribed for it, and I have never been without it since. It hits my case every month with ideas I can use—and it always has.

I did not stop with perusing the regular reading matter. I went right through the advertising pages, and in those pages I have found as much of value as elsewhere. I have picked up many new lines of goods in this way that I would not give up for several times the cost of the journal. The druggist who can't make it pay him handsomely to buy and read the trade papers is sadly behind the times, and needs them more than he realizes.

For the first year or two I did not succeed in boosting my business appreciably. My store was pretty small potatoes. The other fellows were getting the cream of the trade, though to be sure it was not very thick cream.

AS TO HIS CREDIT BUSINESS.

From the first I discouraged much credit business, and accepted that only from people considered as "good as the wheat." Furthermore, and it was a good thing, I needed the money so badly all the while that I was obliged to make prompt collections.

This very thing lost me a little business, because there are in every town a few families who think they ought to be allowed to run as big a bill as they like for as long as they like, merely because they are what we like to call "our oldest families." With me it did not make any difference how old a family might be if it could not pay its bills promptly.

I believe that more independence of this sort would result in a much more satisfactory condition of the average druggist's finances.

When a man buys goods from you or from me he owes us money. The money for them is ours and we are entitled to it. He has no excuse for being disgruntled if we ask for it, or even if we insist upon having it.

The cash basis is the right basis and the comfortable basis.

In the next chapter I am going to deal with plans that got the ball started to rolling. It is always harder work to get it started than to keep up the momentum after it gets going, but hard work has killed mighty few people—in the drug business or in any other.

(To be continued in February.)

A DEFENSE OF "COMMERCIALIZED" PHARMACY.*

By E. C. FINCH.

If we were to soliloquize as did my friend Hamlet, "To be or not to be," and finally decide to be strictly ethical, I am afraid we would not *be* very long. There was perhaps a time, a good many years since, when pharmacy was practiced on ethical lines, but I am glad I did not live in those days. The drug store was then commonly called an "apothecary shop," and I am informed by the journals and some of my muchly traveled friends that in England, Germany, and some of the other and older countries pharmacies are still run somewhat along those lines.

There seems to be a prevailing idea that those who conducted the old apothecary shops were more scientific than we are at the present time, but I am inclined to think that the people who cherish this notion are themselves living in the past, for I am not willing to admit that we are retrograding scientifically. I don't think there was ever an age when our profession was so far advanced scientifically as it is at the present time.

We, of course, have keener competition, and more of it than ever before. But I am glad to say this has had a tendency to elevate the profession as well as to sharpen our wits. Competition has made the competent man either post himself or seek new fields and pastures green, as 'tis a case of "the survival of the fittest."

Another consideration is that there was never a time when there was so much prescription business done as at present, although it seems to some critics that the profession is now commercializing itself. There is no comparison between the present time and that a few years back when I first went into the business. The pharmacist then made nearly all his elixirs, tinctures, plasters, pills, etc., with no degree of certainty as to their strength, for he prepared them from such crude drugs as he happened to have on his shelf; or, if he purchased them from the jobber, they had never been assayed. We

all know now that in order to get a product of the required strength, we either have to assay it after manufacture, or we have to use a drug that has been recently assayed, for even assayed drugs lose their strength after a reasonable length of time, and we have no certainty whatever of the amount of active ingredients unassayed goods contain.

It is not that we are less competent to make these pharmaceuticals than our forefathers were, for we are, and perhaps more so, but the manufacturing pharmacist has centralized this part of the business, making it possible for the druggist to buy standardized and assayed preparations almost as cheap as he could make them. By virtue of the volume of business done by him, the manufacturer is enabled to be much better equipped for such processes than the average pharmacist could possibly be. Furthermore, the druggist, by allowing the manufacturer to look after this branch of the business, has a chance to devote his attention to the front of the store (the place where he is most needed), and he also saves the salary of one or more expensive clerks. This saving alone will more than over-balance the manufacturer's profit on the preparations we purchase of him.

But since most of the particular and prosperous pharmacists are patronizing the manufacturer, there are a great many who claim that the drug store of the present day has evolved into a commercial proposition strictly. This I am not willing to admit or believe. As long as I remain in the business I intend to conduct my prescription department along purely ethical lines, no matter what the pressure of competition may be. I must admit, however, that I am in favor of commercializing the front of the store as much as possible. And why not? No matter what our business is, we have to pay the same rent, the same taxes, and put in the same number of hours, so why shouldn't we add to our shelves such articles of commerce as we are justified in carrying?

The dry goods store has branched out to

*Read before the Tennessee State Pharmaceutical Association.

such an extent that it is impossible to know what to name it, and the hardware store has sometimes developed into a drug store.

It is a well-known fact that if a pharmacist should try to conduct his business strictly along professional lines, he would not be bothered with it very long, for the high sheriff would soon have an inning, then the coroner, and finally the undertaker—for he would be a dead one, sure enough! And I am afraid we should be able to inscribe on his monument what a promoter did on a shaft down in Texas. A friend of mine had a splendid formula for an ague cure, but he had no money. So he took into partnership with him a hustling chap who had a few hundred dollars. My friend was to stay in New Orleans and make "West's Celebrated Ague Cure," and the young promoter was to

be the salesman. The latter, being a versatile artist, could make signs almost at the rate of one a minute. He went through Louisiana and Texas painting ads. and selling the nostrum right and left. While riding along a road in Texas one day he came to a family graveyard. There was one fine, tall shaft which especially attracted him, and being quick to see a good thing, he got out his black paint and brush and painted on the shaft: "This man would not be here if he had used West's Celebrated Ague Tonic!"

The family sued the company, and my friend told me that the courts had never quit allowing damages. So we could easily inscribe on the monument of our brother who conducted a purely professional store: "This man would not be here if he hadn't been so ethical!"

A PHARMACY IN A PHYSICIANS' BUILDING.

That of R. A. McDonald in the Minaban Block, Green Bay, Wisconsin—Something of the Owner and How He Went After the Business of Physicians, Nurses, and the General Public.

By FRANK GANNON EBNER.

R. A. McDonald was doing a very fair drug business in a small Wisconsin town. But Mr. McDonald is one of those fellows who is not satisfied with doing a satisfactory business. He wanted a big trade. His former location lacked possibilities. So he looked for a better place.

In 1907 Mr. McDonald received a tip that a physician's office building was being erected in Green Bay, a city of 30,000, located in northern Wisconsin. He went to Green Bay, looked the field over, talked it over with a few influential men, and in July, 1908, launched an apothecary shop on the ground floor of the new building with a stock amounting to \$8000. The store was fitted up with mission style furniture and everything was put in neat trim to inspire confidence.

The McDonald store is located on the ground floor of a handsome, white tile, six-story structure. The building is situated in the heart of the business district, within easy reach of the many physicians' offices, making it convenient to cater to prescription trade.

Mr. McDonald had his ideal set upon a prescription pharmacy. It was necessary to get the prescription business, and to get that patronage Mr. McDonald had to gain the confidence of the doctors. With that idea in mind, he called, personally, upon every medical man in and about Green Bay. He outlined his policy. He was sincere in his talk with the physicians. Mr. McDonald's policy appealed to them. A number of them were dispensing at the time. McDonald got busy. After three years of honest service, there are only two out of thirty that are dispensing their own medicine.

Outlining a policy and living up to it are two different things. Unlike many, Mr. McDonald made good on his assertions to the physicians on his first visit, and that is what has counted him a success in catering to the wants of medical men.

GAINING THE SUPPORT OF THE NURSES.

Mr. McDonald knew that the professional nurse had a great deal to say in determining where the prescription was to be filled. He

obtained a mailing list of all the nurses in his county. He wrote them a neat, type-written letter on the establishment of a prescription drug store. He asked them to come to his store to enter their names on his nurses' directory.

The nurses' directory consists of a bulletin board with spaces for their cards. The board is divided into two parts, an "in" and "out" division. When the nurses go out on a case, they telephone or call at McDonald's and their cards are placed under the "out" division, and *vice versa*.

Mr. McDonald knew that the professional



R. A. McDonald, proprietor of the pharmacy in the Physicians' Office Building, Green Bay, Wis.

letters, of the establishment of a nurses' directory where they could obtain the services of a professional nurse. This plan made a decided hit, both with the nurses and physicians.

The nurses not only bought their supplies but diverted prescription trade to the McDonald store whenever they could.

HIS ADVERTISING.

Mr. McDonald's advertising centers about his prescription department. It dwells on the importance of quality in filling prescriptions.

Mr. McDonald believes in keeping his name before the people all the time, whether it be before a physician, veterinarian, dentist, nurse, or a layman.

He supplies the physicians with their pre-

scription blanks. He submits several colors of a best quality paper and asks them how they want their names to appear and whether they want the name of a drug store printed on. Everything is left to the discretion of the physician.

Every Christmas he presents the medical men with something. It may consist of a hypodermatic syringe, a call list, a pocket leather prescription pad case, or something that will keep McDonald's name before the prescription writer all the time.

He supplies nurses with "record sheets." Each record sheet carries with it the McDonald name, so McDonald's name enters every home the nurse visits in the course of her work.

The newspaper, street-car, billboards, a monthly store paper called "McDonald's Hustler," all carry the McDonald message. McDonald also makes use of theatrical programs and lantern slides in driving home the reasons why they should deal at McDonald's drug store.

When asked what medium gave the best returns, he quickly answered: "McDonald's Hustler, our little monthly paper, I find the best paying advertisement."

The store paper is made interesting by virtue of its printed matter, which consists of jests, toilet suggestions, special sales and topics that appeal to the housewife.

Mr. McDonald winds up most of his advertising talks with the catch phrase, "If you can't come, telephone." There are mornings, at times, when it keeps two people busy answering the phone calls. He says:

"There are times when people want drugs in a hurry, and the telephone is the means of transferring the goods from where they are to where they ought to be.

"The telephone business must be backed up with good delivery service, or it's a failure, and all the advertising in the world will not make it pay."

Mr. McDonald has boys deliver goods on bicycles.

The fame of McDonald's as a prescription store has spread into the surrounding country until its prescription business has reached large proportions. He makes use of an envelope with the name "McDonald's Drug Store," Green Bay, Wis., marked RUSH for those desiring their prescriptions filled in

a hurry. All goods are sent C. O. D. As a matter of fact, there is very little credit business done in the McDonald store.

The prescription department occupies the rear part of the store. A small window in the center of the case admits a view of the workers. All prescriptions are filled by registered men, of which there are three. When a prescription comes in, the customer is given a check. The original check has three numbers, all alike; one check goes to the customer, the other is pasted on the prescription, and the last is placed on the package when com-

Mr. McDonald advertises quality and makes good on his advertising copy by delivering the goods. Mr. McDonald spares no pains and expense in obtaining the best chemicals and pharmaceuticals on the market. Mr. McDonald is a quality man through to the backbone, whether it's in buying fruit syrups, stationery, or selecting help. Quality counts with him.

Mr. McDonald's first day's prescriptions numbered three. Now they reach the large sum of 45,000 a year. His sales amount to \$40,000 a year.



An interior view of the McDonald pharmacy in Green Bay, Wis.

pleted. Whether the customer waits, calls, or has the package delivered, he gets the right one.

All prescriptions are filled precisely in conformity with the obvious intentions of the prescriber. If any article called for on a prescription is not in stock, the doctor is consulted and under no circumstances is substitution in any form tolerated by the rigid McDonald policy. All solutions intended for the eyes are filtered. Eye ointments are strained and placed in collapsible tubes. Every bottle or box is wrapped in white paper and sealed with sealing wax. Particular attention is paid to putting out neat packages.

SICK-ROOM SUPPLIES.

Mr. McDonald gets a big share of this business of the city because he carries the most complete line of good goods, and secondly, because he has a lady attendant, which makes buying more agreeable to those who would rather have one of their own sex serve their wants on certain supplies. McDonald furnishes the three hospitals of the city with drugs and sick-room goods.

All rubber goods are sold under a positive guarantee that they will give good service or can be returned. Of course, nipples, breast-pumps, etc., are not exchangeable for sanitary

reasons. All buyers are told so before the goods leave the store. "The customer is always right" is the attitude of McDonald, and rather than have a buyer leave the store dissatisfied, he makes it right. For instance, a short time ago a lady returned several nipples, saying that they were not the kind wanted. Mr. McDonald explained the policy of the house regarding the exchange of rubber goods, tore up the nipples in front of the customer and gave her what she wanted.

SODA TRADE.

Notwithstanding the fact that Mr. McDonald centers his advertising on his prescription department, he gets a good share of the soda business. In fact, he does the best soda business in the city. Cleanliness is spelt

No. 41850	WAITING	R. L. McDONALD'S PRESCRIPTION STORE GREEN BAY, WIS.	No. 41850
	CALL		
	PRICE		
<p align="center">YOUR PRESCRIPTION</p> <p align="center">IS BEING PREPARED CAREFULLY AND ACCURATELY AND WITH AS MUCH HASTE AS CAUTION WILL PERMIT EXPERIENCED MEN ARE GIVING THIS DEPARTMENT THEIR UN- DIVIDED ATTENTION</p> <p align="center">R. L. McDONALD'S PRESCRIPTION STORE PRESCRIPTION EXPERTS WASHINGTON AND WALNUT STS. GREEN BAY, WIS. Please Present this Check when Calling for Your Prescription</p>			

Prescription check used in the McDonald store.

in everything you look at in the McDonald store; from the door-knob to the money they hand out in change.

Every drink is served ice-cold in thin glasses previously sterilized with boiling water. Every utensil around the soda fountain is sterilized before a second usage. Every soda concoction, from a lemon phosphate to an egg malted milk, represents the best quality of material served, as he states in his little soda menu, "with that touch of loving care." He puts out a two-page little brown menu booklet which is the best of its kind. It covers the complete line of soda concoctions and is printed in a way that will make any mouth water. The booklet is within easy reach of any one who happens along at the fountain.

The fact that he made \$2500 during the season of 1910 on his soda fountain is an index to the business done.

A good line of cigars is handled, but the trade is not encouraged, largely because of the large women patronage the McDonald store enjoys.

The candy business in the McDonald store

is limited to a box trade. He enjoys a good business in candy. Mr. McDonald does not believe in sticking to one line of goods, but changes often for the reason that people tire of the same kind.

Owing to a large women patronage, McDonald enjoys a good toilet trade. His store being located close to the city theater, he gets a big share of the theatrical trade in grease paints and general toilet articles.

The working force consists of the proprietor, two registered men, one bookkeeper, one soda dispenser, and a delivery boy.

McDonald's name has never been attached to any patent-medicine advertisement, nor has he ever handed out any such advertisement. He does not allow any patent medicine in his window, nor does he display any signs for cure-alls. This iron-clad policy of the McDonald store has gained for the man behind it a prestige that means much to him in his business.

There is no counter-prescribing.

Those seeking advice for ailments are referred to their family physician. Prescriptions are not refilled unless otherwise specified by the physician.

To convey the latter message to the people, use is made of a sticker which is placed on every prescription which is filled.

The sticker cautions the patient not to have the prescription refilled unless otherwise specified by the physician.

Everybody is given exactly what he calls for. Courtesy is the password among the workers of the store when dealing with the public. Courtesy is long remembered even after the price of the goods is forgotten. Courtesy has been a leading factor in enriching the trade of this store.

R. A. McDonald, who has popularized this drug store, is a genial, good appearing chap of about thirty-five years. He belongs to several fraternal organizations, goes to church on Sundays, and stands high in the esteem of his fellow-men. He is on the job every day, but manages to get away long enough to look up a new doctor in the town and convert him to the McDonald faith. His heart and soul are in his work. The very store, the clerks, the advertisements all reflect the brilliancy of the personality behind the institution.

AN UNUSUAL WINDOW DISPLAY.

By **J. EARL TAYLOR,**
Gridley, Illinois.

This trim has one feature which I can claim is original, namely, the background. It may be used as a setting for any variety of things other than the rubber goods and sick-room supplies shown here. If I remember rightly, I never saw such an arrangement before.

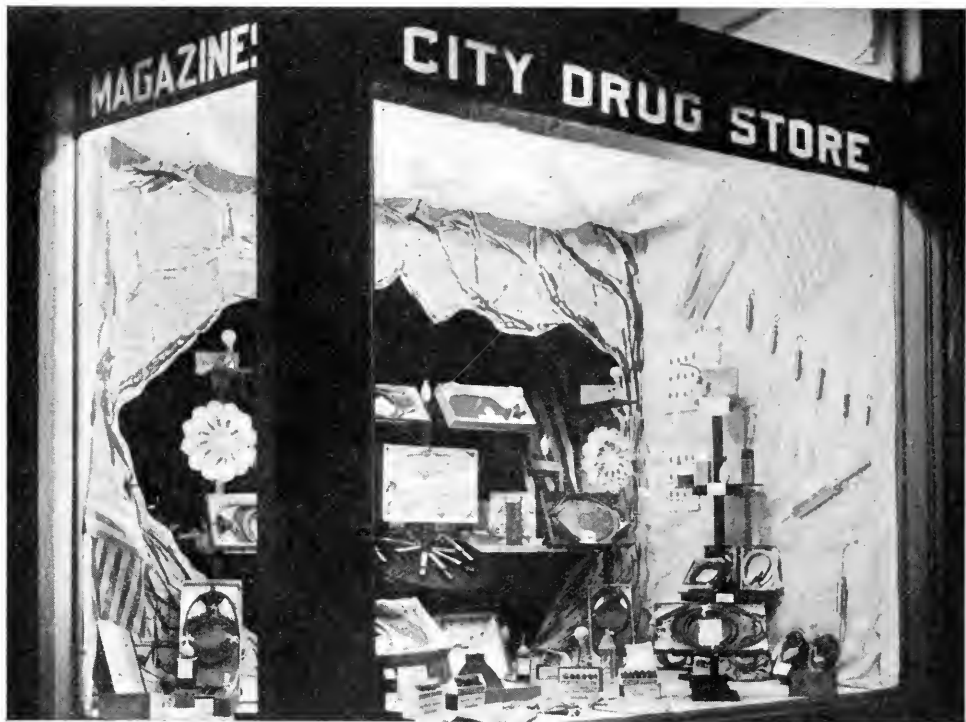
The top of the background is formed by puffing white tissue-paper and allowing it to drape as shown in the illustration. The back of the window is covered with heavy white paper. With a heavy crayon outline the tree

is now quite real and the effect is certainly fine. Try it and see.

The side wall of the trim is covered with white tissue-paper, and a drape of the grand old flag adorns the extreme top.

On the other side the syringes are arranged in the order of size and have price tags attached in full view. Baby pacifiers are set in the extreme back of the trim. The base of the window is white, to carry out the general scheme.

The articles exhibited are hot-water bot-



and branches on the heavy paper. Take a sharp knife and cut around the outline. The tree effect is easily formed, presenting a very realistic appearance to the onlooker, both near by and at a distance.

Next obtain a can of black paint, dip a piece of cotton into it and proceed to daub over the outline with the wet cotton, using a drawing motion. A bark effect is easily formed.

Over the back of the trim cover the outline with, say, green tissue-paper. The tree

tles, fountain syringes; ear, ulcer, nasal, and bulb syringes; breast shields, nipples, breast pumps, medicine droppers, throat bags, ice-bags, eye pipettes, etc. These are all neatly arranged to show to the best advantage over "Onken Younits" that we purchased last year from the makers in Cincinnati. Price tags were good and clear. Almost any arrangement can be made over the "Onken Younits." They are certainly worth the money. We are at present using this trim, and the sales are very satisfactory.

A POTENT TESTIMONIAL.

It Gave Success to a Liniment that was Headed Straight for the Patent-medicine Graveyard—The Whole Story.

By ARTHUR L. BUZZELL.

One who depends on his wits and a rented typewriter for his daily bread is sometimes at a loss for a theme on which to employ such a combination. For days the air seems sterile of story essence, and meditate though he may, the luckless attic-dweller is left stranded on a barren bar of uncertainty, to wear out his spirit in vain endeavor. When such calms strike, it is my custom to cut loose and whistle lustily for a wind; in other words, to hustle around and see what I can find. On Wednesday of last week, while on such a mission bent, I chanced to meet Dr. Pemlico Knox, who took me over to the Occidental and introduced me to a friend of his, a Mr. Harris. The three of us sat at a small table in the Peacock room and exchanged pleasantries over a weak brew for a time. Then Dr. Knox, pleading pressure of professional business, took his leave.

"A natural born advertiser," I ventured, nodding my head toward the retreating figure.

"Not necessarily," corrected Harris. "He has made the right moves, to be sure; but he may have made them accidentally."

"To my mind, that would be impossible," I combated. "What happens is the result of something; the wise man, or the successful man, in other words, looks after the something."

"Or has it looked after him, by accident? But let me illustrate. Have you the patience to listen to a long-winded and not very interesting story?"

My heart bounded loudly, almost audibly. Listen to a story! Would I! Visions of another \$250 payment on my Mexican plantation stock dimmed off into azure hues. I assured Mr. Harris that nothing would please me more than to give rapt and close attention. Glancing at the clock and remarking that there was just about sufficient time if he hustled, he began. As nearly as possible I will follow his faultless style.

"Fifteen years ago," he said, "I was a beardless and anemic drug clerk, and through

an advertisement in a daily paper I secured employment with a man by the name of Frederick Donnelly—F. H. Donnelly.

"Like most men who run drug stores, Mr. Donnelly never got the idea of 'putting out a patent' quite out of his head. At times the obsession seemed to lie dormant like a winter snake, but later it would break forth again with all-consuming intenseness. Time and time again he had tried to launch a Peruna, a Wizard Oil, or a Jayne's Expectorant, and each time had sworn by the moon, the soft east winds, and several myriads of pale blue stars that he would never sink any more money in that particular manner. But with periodical frequency, a mysterious something seemed to breathe a disquietude into his soul which could be antidoted in no other way but the thumbing of printer's ink, the studying of label catalogues, and the estimating of a vast fortune on a corner of the desk blotter. Such orgies often ended in an addition to the drug family, and for days, perhaps weeks and months, Mr. Donnelly was one of the busiest men on the western hemisphere.

"On the same day that I entered his employ, Mr. Donnelly launched Kilpatrick's Liniment. Late in the afternoon of the day preceding my arrival he had received a large consignment of cartons and labels from Chicago, and most of the sleep of the night had been sacrificed that the matter of assembling what he sanguinely believed was destined to become a celebrated liquid, and its accompanying bottle, cork, label, wrapper, and carton, might not be delayed a moment longer than was absolutely necessary. A morning sunbeam, slanting carelessly in through an east window, added an intenser yellow to the goldenness of a row of 'Kilpatrick' standing in military formation on the top of a showcase.

"Mr. Donnelly cuddled his latest progeny with a parent's fondness during many hours of the ensuing day, talked 'Kilpatrick' incessantly, and sold one bottle. The following

day he sold one, the following day one, and the next day none. He then bought a small square of space in the evening paper and launched what he denominated his advertising campaign. A few bottles of 'Kilpatrick' were sold as a result of newspaper publicity, but the daily balance was far from gratifying.

"He had contracted for the space in the daily paper and felt that it must be made to yield all it would in the way of returns. To increase its potency he mailed out a hundred dollars' worth of what he called 'back-ups.' Yet in spite of all his efforts, the waning of the first gross of 'Kilpatrick' found him \$300 to the bad. This showing troubled him greatly, and his enthusiasm began to go the way it had often gone before. He ceased to dream 'Kilpatrick' and merely talked it. However, as a stand in the last ditch, he resolved to amass a bunch of testimonials, have them printed in neat folder form, and have these folders mailed out also, aiming to place one in each family in the city and adjacent country districts. He had read somewhere that a testimonial often took the message to Garcia when other forms and fashions had failed.

"He needed to consult no record-book to ascertain who had bought 'Kilpatrick'; the tablets of his mind carried the names, indelibly impressed. To each purchaser he sent an appeal for a word of commendation; and here again he met with disappointment, for not a soul responded. Nevertheless, being a man of determination, he did not give up. Setting his jaw, he went after the testimonials personally, and in the end accumulated thirty-seven, all written by himself and signed by the purchaser. These were edited carefully, turned over to the printer, and in due time the neat little booklets were delivered.

"Now, I am just an ordinary individual, exempt from the workings of no fundamental law, and I am free to confess that my employer's attempt to hitch his cart to the tail of a strange god had produced in me a condition little short of nausea. There is something in human nature which causes the onlooker to ridicule the efforts of any fellow mortal who strives to put something new into the world. A feeling of resentment wells up and gives birth to an irresistible desire to make the way of the transgressor hard. Let this be the excuse, as far as it will carry.

"To me fell the task of mailing out the booklets. It was a disagreeable undertaking. Had I had my choice I would have much preferred to have made a half-million zinc valerianate pills or to have stocked an arsenal with aloes horse-balls. I was supersaturated with disgust and hoped never to hear or see the name 'Kilpatrick' again, outside a history of the Civil War.

"The little pamphlet was altogether too dull, anyhow. The testimonials were all alike, worded, perhaps, a little differently, but nevertheless all alike. They all began: 'Mr. Frederick Donnelly, Dear Sir: I have used your celebrated,' etc., etc. Or, to vary this somewhat, about every third number led off with 'Having used one bottle of your celebrated,' etc., etc. Not a glint of humor, a convincing clincher, or a point of originality in the entire layout.

"I began to revolve the subject of the testimonial in my mind. It seemed to me that the game must be nearly played out—or at least played so long that a testimonial must be out of the ordinary to gain worth-while attention. I wrote a few and tore them up; and then suddenly an idea occurred to me, an idea which caused me to sit back, stroke my chin with a forefinger, and grin.

"The fate of 'Kilpatrick' lay entirely in my hands. Unseen and unsung, I could give it a whack over the head with a testimonial which must its quietus make. Why not do it and end its agony? Why not turn humanitarian and save my employer, who at heart was by no means a bad man, from a fate worse than death?

"Far into the night I labored and perspired, but in the end I conquered. The next morning I had my testimonial printed on a sheet of proper size to make a nice little insert; and during the next few days I mailed out the booklets. The thirty-eighth testimonial ran like this:

Good Mister Frederick Donnelly, Sor:
In answer to yer letter
I take me pen in hand to say
That Pat, I hope, is better—
He's dead.

Yer medicine no doubt's all right
For a certain kind of caseys,
But Pat he couldn't stand it, quite,
It knocked out all his braces.

"Kilpatrick's Liniment" in black—

Faith, that was on the label,
And to kape its word it surely proved
That it was amply able.
Oh, werra, werra.

—BIDDY O'BRIEN.

"Did 'Kilpatrick' die also? It did not. During the next three weeks we sold fourteen gross. Man after man and woman after woman brought in the insert, passed it over the counter with a face cracked from ear to ear and called for 'a bottle o' that stuff.' The humor appealed to them, and 'Kilpatrick's Liniment' was headed straight for the *Bookman's* list of the ten best sellers. We found

it absolutely impossible—but, pardon me. There comes the man with whom I have an appointment; the man for whom I have been waiting."

"One moment, please!" I cried, grasping him by the coat-sleeve. "Your unfinished sentence implies—"

"That for a time we found it absolutely impossible to—"

"And then?"

"Donnelly fired his advertising man. But permit me to introduce Mr. Hendricks."

Five minutes later Harris and Hendricks were banking for shot. And five hours later I dropped this story into a corner mail-box.

"MY BEST ADVERTISING SCHEME."

**One Druggist Hits upon a Good Plan of Developing a Demand for His Own Toilet Lotion
—Another Consigns Goods Systematically to His Customers, Collecting
Later for the Articles Used—How These Ideas Worked Out.**

DEVELOPING A SALE ON A TOILET LOTION.

By STANLEY CAIRNS, FOREST, ONTARIO.

Your "Best Advertising Schemes" are very interesting, and I wish to describe one we have used to push our own preparations by forcibly drawing to the minds of people the prospects of a bargain.

The scheme centered about a toilet lotion which we had recently made up and put on the market. We were confident that our product was as good as any. The package was very neat, consisting of a special shaped bottle with an artistic label and capping. Nevertheless, we saw it was going to sell slowly with the aid only of newspaper advertising and our pushing it behind the counter. So we had 1000 cards, about the size of a postal card, printed, announcing that each one was worth 10 cents. Rather, we said that in order to introduce this new toilet lotion to the public, we would give any one who signed the card and presented it at our store a full-sized 25-cent bottle of our toilet lotion for 15 cents. We made it plain that this offer was good for two weeks only, or as long as the goods were displayed in our windows.

We had a facsimile of the above card printed in both local papers, permitting the

readers to cut it out. This we did more for the advertising and to catch the country people. We allowed only one bottle for each family. We made an enormous quantity of the lotion, arranged a handsome display of it in our window and part of a show-case.

It is surprising how the majority of people will take advantage of a bargain, however small it may be. I am always ready for one myself, and storekeepers everywhere say that the wealthy people are keener bargain fiends than even the poorer class.

We placed our cards in plain, unsealed envelopes and mailed one to the lady of each family in town. The result was very gratifying to ourselves, for at the end of two weeks we had sold 462 bottles. Nearly one-half of the cards were returned. Now the whole cost of each bottle when sold did not amount to 11 cents. So we had quite a little money to show for our two weeks' work. But when we started out we did not intend the scheme should be a money-maker. We just wanted to break even. Needless to say, we have sold hundreds of bottles of toilet lotion since at 25 cents a bottle.

If we had continued to advertise in the papers instead of sending out cards; or if we had marked the price 15 cents in our dis-

play, I don't suppose we would have sold a hundred bottles. But placing the card in their hands made them think, "This is worth a dime, and as I need a lotion I may as well get it." So they bought it, and when it was satisfactory they bought more. We could often make a sale by merely mentioning the bargain to a customer while shopping, and thus interesting him.

We have used the same scheme for several other preparations of our own, and one that was most satisfactory was a "condition powder" for animals, a regular 50-cent package which we sold for 30 cents. Nearly every farmer for miles around secured one.

In conclusion, I may say that whatever preparation of your own you are trying to market, make sure that it is as good or a little better than those being sold already. A customer can be fooled once, but not twice.

We also find that a neat and attractive package is necessary for a quick sale. Most people buy a specialty the first time on the strength of the external appearances, but the quality of the goods determines the second purchase. A handsome label, of course, always gives a good impression.

Another thing, we never advertise our goods as being of our own manufacture. Rather, we give our customers the impression that we are a favored agency for distribution of certain goods. We find that we cannot push our own make of preparations as well as those made elsewhere. The customer sees our purpose, which is to make more money for ourselves. Most people, or rather a lot of them, have the impression that if a product is made in Toronto or a big city, it must be good. They have in mind the immense factories seen, for instance, on the front of Peruna calendars as being the source of the goods.

A NOVEL PLAN FOR PUSHING SEASON- ABLE GOODS.

By O. P. McPHERSON, GLOSTER, MISS.

We all admit that to push an article it is necessary to keep it before the people. The question then arises: "How can that be done to the best advantage?" I found this plan worked nicely, and it may prove beneficial to others.

All druggists have more or less dislike for being called out of bed on a cold, rainy night.

So one cold, rainy afternoon when business was slack, I conceived a plan whereby I could avoid being summoned out that night for any cases of croup or cough that such an evening usually brought forth. Calling my clerks together, I set them to wrapping up bottles



O. P. McPherson.

of cough medicine of my own make. In each package I enclosed a note:

DEAR MADAM: Realizing that this is an excellent night for the children to suffer with coughs and croup, I am sending you one of our bottles of cough medicine. Please put in a convenient place, and if you have an occasion to use it, do so. Otherwise, let the package set there in your house until I send for it. Or you may return it. As a method of keeping our records straight we have charged the medicine to your husband's account, and when it is taken up we shall give him proper credit.

Thanking you in advance for the kindness, we are,
Yours very truly.

Well, we sent out three dozen bottles that afternoon. Since it was only a few days until the first of the month, we delayed sending back for the goods until our collector had an occasion to go into that neighborhood. When he went, we had him take along a basket upon which was written Cough Syrup. But to our surprise, when he came in that evening, he had only one bottle of medicine returned for credit. However, in the collection of accounts we found some who thought we intended giving them the medicine. In such cases we compromised on a half-price. We sold three dozen bottles and created a nice

demand for our cough cure. And I was not called out that night for any cases of croup, either!

The plan worked so well, I determined to try it more scientifically. So I took empty cigar boxes, cut them in shape to make a pretty decent little case or box, and asked permission to tack one in each home near the telephone. On the front of each box I wrote: "For Results, Phone 85," and each month I would watch the weather, time, places, and social functions, and have my corps of boys, dressed in white and blue, make the rounds and leave something new and needful in each box, after taking up the old

articles, if any was left. If the weather turned cold, I sent cold cream, cough syrup, etc. If there was an entertainment, I sent face powders, perfume, etc. If it was Saturday evening, I sent toilet soap or shoe polish, and so on.

Our sales amounted to \$85 the first month on this plan alone. The expense was about ten per cent of the sales. And while these little fellows made the trips, we always had them take from the store all surplus advertising matter for the children. I found it was a magnificent plan for unloading any article that was not staple and was liable to become stock worn.

A TALK ABOUT BUSINESS BUILDING.

By A. F. SHELDON,

Formulator of "The Science of Business Building" and Editor of *The Business Philosopher*.

An important success injunction is, *Know the other fellow!*

Thousands of dollars have been made by knowing how to handle the other fellow.

Thousands of dollars have been lost by not knowing the other fellow and by putting him in the wrong place.

Thousands of dollars have been expended by fond parents in their attempt to make doctors and lawyers of sons that nature never intended for such professions.

Thousands of hours of honest effort have been wasted by those who have been advised to go into lines of business for which they had no ability.

Thousands of lives have been ruined by persons of jarring temperaments marrying.

Thousands of parents have quarreled with their children and turned them adrift—simply because they did not understand their children.

Thousands of children have quarreled with their parents for the same reason.

Thousands of men on the road fail as salesmen simply because they don't understand the other fellow.

Thousands of merchants become bankrupt because they do not understand men and women. Instead of securing and retaining

patrons, through their want of tact they lose those who come to them with their trade.

I put the question to you, Mr. Employer: How can you handle the men under you if you do not understand them?

I put the question to you, Mr. Salesman: How can you sell goods to persons you do not understand?

Since the greatest statesmen and the greatest professional men owe their success largely to their skill in handling men and women, can you afford to be without this knowledge?

Can directors of banks and railroads and corporations, in whose power it lies to select men for executive offices, afford to put the wrong man in the high place?

Such a mistake may involve a railroad or corporation in bankruptcy because of the incompetency of the man selected. A man may be elected president of a bank, who is by nature a defaulter.

There was an excuse for this before character analysis had become a science. Now, however, this science has been formulated and developed to a high degree of accuracy by Dr. Katherine M. H. Blackford, of Boston. The man who would be progressive must master it to keep up with the age.

There is a story told of a doctor being

called to treat a shoemaker who was thought to be dying. The shoemaker craved salmon. The doctor thought the man was in such a desperate state that he might as well let the fellow have what he wanted, as at the worst the salmon would kill him a few moments earlier only. However, to the doctor's surprise, the salmon cured him.

Later the doctor was called to cure a blacksmith suffering from the same complaint. As the salmon had been so efficacious in the case of the shoemaker, the doctor thought it would be equally so in the case of the blacksmith. The result, though, was different. The blacksmith died. So the doctor wrote down in his memorandum book: "Salmon cures dying shoemakers, but not dying blacksmiths."

"What is sauce for the goose is sauce for the gander," is not true in the business world. You can't cure the blacksmith with the same medicine that cures the shoemaker.

Different temperaments must be treated differently. Different methods of appeal must be made to them. The same things strike them differently.

If all men were alike, salesmanship would not be an art.

You know, you must handle the quick-tempered man with gloves; the lethargic person you must urge to action. This much the novice knows. But mankind is not divided simply into the quick and the slow. There are many types and variations.

The art of analyzing character scientifically is not as simple as the alphabet. Before you can judge a person you must take into account his coloring, the shape of his features, his manner, the tone of his voice. In fact, quite a few little points that only the student of human nature can know must be remarked. You must be able to do it quickly, too.

The value of such study I am sure you must feel. If you are looking for commercial or professional success master it. It will repay you largely.

Equally important is another success injunction, *Know your business*.

This means more than know your job, though you should make sure you know that first. After that, however, you should get busy, and know the job above yours. Yes, even the job above that. For the fellow just above you may not be able to fill the job above him. If you can, there is your chance.

While it is *the doing* that counts in the *battle for success*, it is not the doing that starts the *battle for success*. It is your preparation to do the things that should be done when the opportunity arrives that enables you to "make good" at the supreme moment.

Make the world need your service, and the world will pay you for your service. The more you make the world need it, the better it will pay you.

Who is the man who is always looking for a job?

The efficient man or the inefficient man?

Is it the fellow who brings in the weather report, or is it the salesman who hustles and gets the orders? Is it the bookkeeper who strikes his balance "first pop," or the fellow who adds the year of our Lord in his columns and then takes a week to discover the result of his mind-wandering? Is it the aspirant for histrionic honors who thought "shuffling off this mortal coil" in Hamlet's soliloquy meant "to take off your clothes," or the actor who has mastered his art to perfection—the Garrick, the Siddons, the Booth, the Bernhardt, the Irving, the Mansfield—that takes the world by storm?

The man who takes the world by storm must be able to *do something worth while*.

Is it the railroad clerk "who gets his traffic charges mixed" and charges you passenger rates on a car-load of pigs, or the Harriman or the Hill, who masters railroad technique to perfection, that becomes the president of the road?

Is it the one-hundred-and-fifty-words-a-minute stenographer or the graduate of the "four weeks' course in shorthand," whose notes are as undecipherable to him as a chop-suey bill of fare in original Chinese would be to us, who is always looking for a job?

Why are so many men always looking for a job? Why are not more filling *the* job?

I will tell you the reason. It is because the world is always looking for *competent service*. It is not going with a searchlight looking for the man who wants a job—but the man who can *fill the job* is always *sure of the job*. The job wants him—more jobs than he can fill. Job-hunters are not job-fillers, and job-fillers are not job-hunters.

To be a *job-filler*, you must be a man whose positive or success qualities are developed. The world doesn't want sick men, but well

men; not moral wrecks, but reliable men; not timid men, but bold men.

Obeys the laws of health; develop the powers of your mind, *your thinker, your feeler, your rememberer*. Give these three the proper exercise, and the world, because of the ef-

ficient service you can render, will recognize you as a competent man. Then develop your "imagineer" and your "willer," and it will recognize you as an exceptional man—a man of initiative.

You will stand at the threshold of Success.

"WE SELL EVERYTHING BUT LIQUOR."

How a Waynesburg, Pa., Druggist Has Made this Slogan Tell in Bringing Him Reputation and Support in a Locality where the Saloons have been Voted Out.

James S. Gleghorn, of Waynesburg, Pa., is a druggist who has made himself quite famous locally by refusing to handle liquor in any form and for any purpose. He displays a sign conspicuously in his store bearing this legend: "We Sell Everything but Liquor."

fortunate situation has arisen like that which has been witnessed all over the country during the last few years with the spread of the temperance movement. It is in order to keep his own skirts clear, and to prevent any stigma from attaching to him, that Mr. Gleghorn has refused to keep liquor even for dispensing on prescriptions. And he is clever enough to make some advertising capital out of the conditions so that the public may know where he stands.

Recently the *Washington Observer* sent a reporter to interview Mr. Gleghorn, and the resulting article, printed on the front page of the paper, may be seen in our reproduction, with Mr. Gleghorn's portrait embellishing the story. The published interview was as follows:

Waynesburg comes to the front with a druggist who absolutely refuses to sell liquor under any circumstances. This druggist is James S. Gleghorn, manager of the Quality Drug Store.

On entering the Quality Drug Store one is greeted with the conspicuous sign: "We sell everything but liquor."

This sign means exactly what it says, as not even a physician's prescription is sufficient to produce the "goods," for liquor is not even kept in the store.

In discussing the question of liquor Mr. Gleghorn said to a representative of *The Observer*:

"I think it is best not to handle liquor in any form—not even for medicinal purposes—because a druggist who sells liquor even on a doctor's order furnishes the public a chance to give the druggist an unjust reputation.

"I think if the public must have some place where it can purchase liquor it should furnish that place—but it should not be the drug store. It is my opinion that druggists would do more business and make more money if they would let the rum business alone and devote their time and energy to honest efforts along other lines.



Front page of the *Washington Observer* containing the interview with Mr. Gleghorn printed in a conspicuous manner and accompanied with Mr. Gleghorn's portrait.

Waynesburg, and the near-by town of Washington, are in "dry" territory, and the liquor drinker, denied satisfaction in saloon or hotel, brings pressure to bear upon the druggists, who are supposed to sell intoxicants for legitimate medicinal purposes only. Thus an un-

"The illegal selling of liquors is just as bad as the illegal selling of narcotics, and with the prohibition craze sweeping the country, all eyes are turned upon the druggist, especially in dry territory, and no druggist who values his reputation can really afford to handle it. It is advisable not even to dispense it on prescription for strictly medicinal purposes, as the medicinal value of liquor is decidedly overestimated.

"It is this particular feature of our business which is mainly responsible for bringing odium and disfavor upon our profession in dry territory, for unfortunately the world does not judge people or a profession by its highest type, preferring to cast the lot of the whole with the few, which is entirely wrong and unjust, as there are thousands of honorable, upright, conscientious men engaged in the practice of pharmacy, and it is but a small minority who indulge in this debasing and nefarious practice that brings the entire profession into disrepute."

Another Washington newspaper, the *Reporter*, noticed the interview in the *Observer*, and published an editorial on it under the title of "A Model Drug Store." Mr. Gleghorn was lauded for his honorable attitude, and the dignity of true pharmacy came into its own in gratifying measure.

From a personal letter to the BULLETIN OF PHARMACY, describing the situation, Mr. Gleghorn has these things to say:

"I have been endeavoring to show the people since coming here that it is not necessary to sell liquor in order to make a success of our calling, and that a druggist is on a higher level than a saloon-keeper. I am forced to admit it has cost me money to carry out this idea, but the gradual growth of our business shows that we are winning the fight. My efforts are being closely watched, and now the newspapers have taken up the subject, as you will note by *The Observer*.

"I tell you what, the BULLETIN OF PHARMACY has taken the right stand about selling liquor in drug stores, and I feel sure you would take a still firmer one could you but meet conditions face to face as they exist in dry territory such as we have here. This store, before I bought it, was a noted booze joint. Ladies scarcely ever traded here, but to-day, in less than a year and a half, we have a very exclusive trade, and most of our customers are women at that. This is the third time I have taken such a store and turned it into a legitimate pharmacy, but I have decided that it is the last time I shall ever attempt such an undertaking. A fellow has a double job on

his hands, you see—that of living down the past bad reputation of the store, and also that of building up a new reputation, which in dry territory is no easy matter, I can assure you.

"I am not a temperance fanatic at all, and I have no objection to a man taking a drink, providing of course he knows how to handle it, but I do think that the spread of the temperance movement is working untold injury to our calling. Unfortunately there are always those who are willing to take advantage of such a situation for personal gain, regardless of its moral effect on themselves or their calling. The consequence is we are made to suffer as a profession for the failings and shortcomings of a few. It is and always has been so, and that is why I think our associations should go on record as being opposed to the liquor traffic and to those members of the calling who are in the drug business mainly for the liquor end of it.

"I have so often heard things that cast disfavor on our calling, even from the pulpit, that at times I am almost ashamed that I am a druggist! To my mind this is a serious question and one that will have to be settled either one way or the other by every druggist all over the country, but the question that concerns us most is: What kind of a stand will the majority take? The stand we should all take is to refuse to handle the stuff—in fact, the only thing left for us to do is throw it out entirely.

"This is the very thing I have done. I don't believe in waiting for the other fellow to act—I act for myself."

The New Elements.—

Sir William Ramsay says that the discovery of radium and radioactivity has indicated the existence of no less than 26 elements hitherto unknown. Besides the new gases, helium, neon, etc., there are a number of elements which are so unstable that their properties have not yet been determined. Considering the time in which an element becomes half-changed into other bodies, one of these new elements has a half-life of $3\frac{1}{2}$ minutes, another 19 minutes, another 27 minutes, another $2\frac{1}{2}$ minutes, a fifth 4 days, a sixth 5 days, a seventh 40 days, an eighth $16\frac{1}{2}$ years, and radium itself has a half-life of 1760 years. The difficulty of studying elements which change into something else in a few minutes is apparent. Probably all of the new elements are derived from uranium, which has the highest atomic weight (238.5) of any known element.

DOLLAR IDEAS

MR. MINTON'S FORMULA FOR BASHAM'S MIXTURE.

P. L. Stanton, Jamestown, N. D., says that the following formula of Basham's mixture contributed some time ago to this department by P. I. Minton does not make a strictly U. S. P. preparation:

	Cc.	Cc.
Ammonium carbonate	12.5	6.25
Acetic acid*	280.0	140.0
Tincture of ferric chloride...	20.0	10.0
Simple elixir	60.0	30.0
Glycerin	60.0	30.0
Aqua q. s.....	500.0	250.0

To this criticism Mr. Minton replies: "I surely intended acid acetic *dilute* to be used in my Basham's formula. This mistake should be corrected. The formula then yields a product that is *strictly* U. S. P. as may be seen from the following comparison:

U. S. P. FORMULA.

Tincture of ferric chloride.....	20.00 Cc.
Diluted acetic acid.....	30.00 Cc.
Solution of ammonium acetate...	250.00 Cc.
Aromatic elixir	60.00 Cc.
Glycerin	60.00 Cc.
Aqua enough to make.....	500.00 Cc.

MY QUICK FORMULA.

Ammonium carbonate	12.50 Cc.
Acid acetic diluted.....	280.00 Cc.
Tincture of ferric chloride.....	20.00 Cc.
Elixir aromatic	60.00 Cc.
Glycerin	60.00 Cc.
Aqua enough to make.....	500.00 Cc.

"By comparing the two we find that solution of ammonia acetate is 5-per-cent ammonium carbonate in diluted acetic acid. Therefore in the 500 Cc. of Basham's mixture there should be 12.5 grammes of ammonium carbonate as per my formula. Five per cent of 250 Cc. equals 12.5 grammes. The 250 Cc. of diluted acetic acid contained in the solution ammonium acetate, plus 30 Cc. in the U. S. P., equals 280 Cc. as in my formula. By simply figuring out the amounts it surely can be seen that the two formulas are exactly the same. The only difference is in the combining of ingredients."

A PRESCRIPTION RECORD.

H. F. Goodrich, Anoka, Minn.: Customers who maintain charge accounts frequently give

trouble when settling for prescriptions, claiming that the goods charged must have been for some one else as they did not use any medicine at the time. Most of these complaints can be easily settled if, when the prescription is charged, the number is noted at the same time. Then when the customer insists that he has not purchased any medicine, it is an easy matter to look up the original prescription and describe the preparation to him. Nine times out of ten he will recall it at once and pay his bill without further question. This method, too, gives a convenient means of reference when the customer wishing a refill has forgotten his bottle with number attached.

BOOK SALES.

Arthur Irwin Smith, Fulton, Ky.: Do you handle books as a side-line and find their sale slow? The following plan will be a business booster: Advertise that you will accept any book you have sold, plus ten cents, in return for any other book in your stock. This will attract many new customers who will readily see the endless-chain possibility of getting cheap reading matter. You will realize the usual profit on the first sale, and each extra ten cents will be "velvet." Of course, all books returned must be in first-class condition.

Try this plan, and you will find that it beats letting the stock lie idle.

LUBRICATING BARREL SPIGOTS.

Charles K. Stottemeyer, Hancock, Md.: In order to prevent the spigots which are attached to syrup barrels, coca-cola kegs, etc., from becoming so tight that they cannot be turned, smear them with a little glycerin before putting them in; and every few weeks put in a little more glycerin around the turning part of the spigot. This will save many an annoying fifteen minutes in trying to turn a spigot that is cemented fast with crystallized sugar.

MARKING PRICES ON RUBBER GOODS.

Alex. F. Peterson, Missoula, Montana: For marking prices on cutlery, mirrors, rubber combs, etc., tincture of benzoin applied with a small camel's-hair pencil produces a surface that can be written on with ink of desired color. This plan obviates any possible risk of blurring or scratching, and the writing is much more legible than when done with benzoin itself in the ordinary way.

*This should be *dilute* acetic acid, as Mr. Minton explains in

LETTERS

OH, YOU ADVERTISING MANAGERS!

To the Editors:

By the way, it just strikes me that I can give you a tip in your capacity as editor. It's all right—I expect no fee for it!

Remember my telling you that I am busy preparing for my anniversary? Well, in connection therewith I wrote to a number of manufacturing firms for free samples for distribution on this occasion. Now this is what I mean: roast the advertising managers* of these manufacturers!

In answer to most of my letters I received a slip with a request to send in an order for goods running all the way from \$10.00 to \$50.00. Does it ever occur to these fellows that the man who has to ask them for samples must be a small man? The big fellows are selling advertised goods in large quantities and therefore get the samples thrown at them. Naturally, however, they feel that they don't need to bother with another man's samples. Besides, their trade is such that samples are hardly necessary. What is the consequence? In nearly all of the big stores you can find manufacturers' samples flying around all over—under the counters, down in the cellar, in the garret, and finally, when the porter gets a cleaning fit, he fires them out into the ash barrel!

Along comes the small druggist with the small clientele. His trade would appreciate such a thing as a free gift. If he is an advertising man he will make good use of samples, for with his trade a sample day would be looked upon as an inducement. It would be a day that would bring dollars into his till, but the advertising manager will tell him: no samples except with a \$10.00 order!

Now where does the sense come in? Do the advertising men think the small fellow wants to employ these samples for his own use? Wouldn't it be a good deal more profitable to give the man who goes to the trouble to ask for them a limited number of samples, and thus be reasonably sure of their distribution, and judicious distribution at that, than to send them promiscuously to those who buy the quantities but actually have no use for sam-

ples? But that seems to be too much for the great advertising manager to understand.

Maybe if they see an editorial on such a question they will wake up, so I hope you will do your ugliest. *Sonst nichts.*

OTTO P. M. CANIS.

Ozone Park, Long Island, N. Y.

[NOTE BY THE EDITORS.—We have never conducted an expert inquiry into the sanity of the advertising managers of the country, and we do not know just how much they deserve this vigorous and indignant protest against their autocratic attitude. We suppose, though, that they adapt expenditures to receipts, and estimate that so many dollars in sales will justify so many dollars in samples. Otherwise they might spend more of their employers' money than they made for them, and thus find themselves out of a job. Their attitude, then, seems merely a scheme to hold their places. It would be heartless to turn a lot of advertising managers loose on the street looking for new positions.]

WANT TO JOIN THE "SOCIETY OF NON-WORKERS?"

Dear Billie and the rest of the "Boys":

I don't know that your name is Billie, but it sounds sort of friendly to use that word.

The main fault I find with all pharmaceutical publications is the great stress they put on *work*.

You must get down to the store before the other fellow does. You must keep open a little later at night.

You must hustle like the very devil while you are there to keep the other fellow off your heels.

You must dress your window twice as often. You must have twice as much light in your store. You must smile twice as much.

You must be a joiner—a member of the Cuspidor Club, secretary of the Golden Stars, Chaplain of the Bibbers, Chief Cook and Bottle Washer for the Capsule Clique, and so on.

Work, *work*, WORK, give 'em h—ll, set your clock to get up at four and then beat it by an hour or two! Don't shut up your store till morning. When you see a customer coming in, don't stop if you are bleeding at every artery. Jump for him as though he were the last rat you ever expected to eat.

Follow the Bible doctrine—be accommodating. If the customer asks for five stamps for a nickel, give him six, and if he wants a match, give him a box with your name embossed in gold on the lid.

Advertise, give away souvenirs, throw in

a house and lot with every tenth sale, put a twenty-dollar gold piece in the box every Sunday, and vote for the "Anti's" during the week.

Eat your dinner with one hand and put up medicine with the other. If you can just get one lap on the other fellow, it will soon be two, and then you will have him going.

Work, *work*; for God's sake, WORK! This is the everlasting cry! Work so you can get money to buy food to give you strength to work some more!

When you take a vacation, the whole idea is to get strength to give the other fellow a better run for his money when you get back.

The Song of the Shirt—did you ever read it? Have you felt the tragedy in every line? Poor Hood, facing inevitable death in the near future, felt the sarcasm, the irony, the bitterness of it all!

Would that a cyclone might come along and wipe off the face of the earth once more—grind every building and every pavement and vestige of civilization to impalpable powder and scatter it to the four winds! Let us be Hottentots once more! With one suit of God-given clothes, and the natural fruits of the earth, let us wander forth in the morning with no fear of approaching night!

Now, dear editor, please publish a lot of pieces about how to get *out* of work. Show us how two drug stores in a little town can run alternately—one the first day, and the other the next, so that each man can loaf with his soul for half the time.

Or, better still, have some corporation lawyer tell us how we can frame up a law to keep one drug store from being nearer than ten miles to another.

Let us quit talking about the "higher" requirements of our "profession" so long as a gray-headed man with the cares of a family on his mind has to march clear back to the prescription case to put up ten cents' worth of calomel in a beautifully decorated box.

Will some one write a piece about how to get out of work? How to enjoy the scenery around us—the woods and fields, the flowers and birds, the sky and sea?

Why must we work to get money to buy admission to some art gallery to see base imitations of what all out-of-doors offers us free of charge?

Why pay to see Romeo and Juliet parade

before our vision, when we can stand on the street corner and watch the whole tragedy being enacted every day?

And I tell you, Billie, if I could tear loose from this drug store and ride up the Detroit river on an early September morn when the lifting fog, chased away by the rising sun, presents that beautiful imagery to the eye, I would be willing to give away a bottle of patent medicine with every mile!

What we need is a Society of Non-workers. I want to be the first charter member. Will you be the next? GEO. W. STAPLE.

Meridian, Miss.

HOW MUCH DID I MAKE LAST YEAR?

To the Editors:

At this season of the year all of us are thinking more or less about the financial result of the year's operations. I wonder how many retail druggists are really in a position to know this most important feature of their business?

I am reminded of a certain pharmacist who was in a state of great anxiety owing to the records that he had kept showing a profit of \$3500 on his year's sales, whereas his assets showed a marked depreciation over the previous year, without his apparently having drawn from the business any of the profit mentioned. And well might this be the cause of anxiety, although it is very probable, in this particular case, that the discrepancy was due to inaccurate or incomplete records, and not to any actual loss of capital.

Proprietors of drug stores are not expert accountants. This cannot be expected, nor is it necessary. Every business man, however, should at least be conversant with the basic principles of a simple system of bookkeeping that will show at the end of stated periods the results of his business transactions. This knowledge is not nearly so difficult to absorb as many may think. Principles of bookkeeping are much more easily instilled into the minds of business men than other students, owing to the close relationship of such principles to common business practice, with which the former are thoroughly familiar.

My suggestion to the tradesman who has no adequate system of bookkeeping, and whose business does not warrant the employment of a bookkeeper, is that he seek the ser-

vices of a good, experienced accountant to install a simple and practical method of recording financial transactions. With some instruction from the accountant, and by the subsequent devotion of a little time each day, Mr. Businessman can easily keep his books written up, and when the end of the year comes he will have the satisfaction of knowing to a certainty where he is at. The amount paid for the accountant's services should not be large, whereas the benefits derived would undoubtedly warrant such an expenditure many times over.

Detroit, Mich. NORMAN H. F. McLEOD.

MAKING MEN OF CLERKS.

To the Editors:

Just to-day I picked up a drug journal and on one page saw a picture of a poor druggist eating his dinner behind a prescription case surrounded by pills, extracts, lotions, etc. In the accompanying article, all the tortures that go with the pill business were outlined.

Let me say, however, that the conditions are just what the druggist himself makes them. I prefer eating dinner at home, with at least one hour to spend with my family. Good help is not so hard to find as that writer would have us believe. He seems to be unwilling, indeed, to trust his business to hired help. He must be on the job at all hours, or things will go to pieces. No one knows how to handle the trade but himself. And surely no one knows how to handle it worse than himself!

Why don't such a man get out in the fresh air, shake the moss off his back, soak up some of the sunshine, and replace that weary look with a smile? If he hires help, why doesn't he have more confidence in it, turn the store over to the clerks occasionally, ask their opinions, let them use their ideas in stock arranging and window dressing? Quite often they have good notions in their heads.

There's nothing that kills the good-will and ambition of a clerk quicker than a grouchy and suspicious boss.

I don't think the average clerk is guilty of one-tenth the neglect he is accused of. Show him what to do and what is expected of him. Be sociable and friendly to him, discuss your plans with him. Above all, give him your

confidence, and you will get good service in return.

The druggist who is constantly looking for faults in his help, who keeps his business to himself and always has a grouch, certainly has a hard row ahead of him. If he were farming, his plow would not be scoured until the weeds had his crop.

Spalding, Nebraska. NICHOLAS FOX, Ph.C.

SHE WAS IN TROUBLE.

To the Editors:

Having been a subscriber to the BULLETIN OF PHARMACY for many years, I take the liberty of enclosing an amusing order for reproduction in your journal, if you see fit to use it. Apparently the lady had been having some trouble with a wandering husband! Is there any sovereign remedy for such difficulties? In

DR W E Walker Please
Send Me 5 lb of March
of Love powder is all
a Married Woman and
My old ~~Man~~ Man is
a rambler about and
must stay at home and
Make Me a living and
if that is my thing
of the kind that will
Make him stay at
home I want it
Please don't let this
get out it is large
5 lb for it

any event it may prove of interest to other readers, and in the meantime I would like to say that I think the BULLETIN OF PHARMACY is the greatest journal published! I would not be without it at any price. I look forward to its coming with almost as much interest as I do to pay-day.

J. DRAPER,
Corinth, Miss. With the H. E. Walker Drug Co.

To the Editors:

To us the BULLETIN is our "Family Bible."
Kalamazoo, Mich. M. E. LUTHER.

BUSINESS HINTS

Soliciting Telephone Orders.—

The telephone business is worth going after. Messrs. Wilkinson & Co. of Keokuk, Ia., distribute a four-page folder, used especially to cultivate buyers who order



**Tell it to us
on the
Telephone**

The cover.

goods over the phone. The cover is seen in the accompanying etching. The inside pages read as follows:

TELL IT TO US ON THE TELEPHONE.

Tell us what you want—tell us whether you want it in a hurry or not.

Our telephone service is increasing in value every day because it saves so much time and is so helpful in taking care of many of the details that would otherwise annoy you.

Those of our customers who take advantage of our telephone service have expressed their surprise at the speed with which we take care of their orders.

Might not all this be true of you? Aren't there many occasions arise during the day in your home when we might be able to assist you and save you many unnecessary steps?

Perhaps you do not know that we deliver any article you might desire.

In addition to calling for, filling and delivering prescriptions, we will deliver any other drug-store goods that you may care for. It makes no difference whether the sale is a five-dollar or a twenty-five-cent one, we will take care of you in a satisfactory manner.

Call us on the phone. Let us demonstrate the worth of our telephone service. Number 68, either phone.

WILKINSON & CO.,

J. Fred Kiedaisch, Manager.

Keokuk's Biggest, Busiest and Best Drug Store,

422 MAIN ST.,

KEOKUK, IOWA.

The paper is of a light lavender color, the ink being a dark purple—a very good color combination.

A Pretty Easter Window.—

Jewell A. Still, manager of Dedman's Drug Store, Arkansas City, Arkansas, has found the display illustrated in the accompanying engraving a good Easter

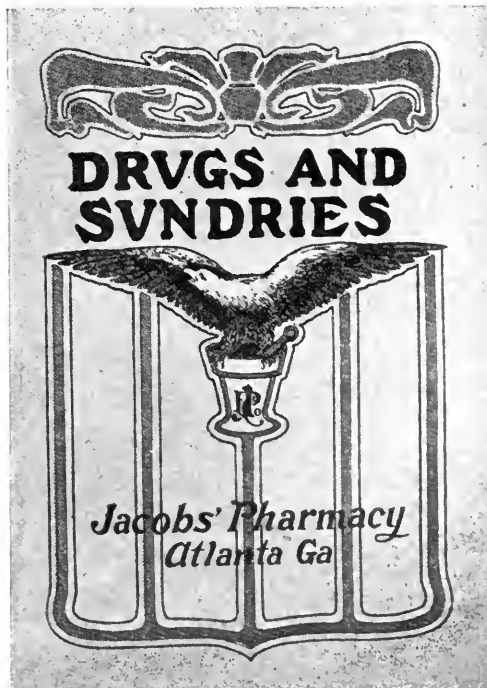
window. The articles exhibited consisted in the main of perfumes. Holly leaves and crêpe paper were used



by way of ornament, while several window signs bore on the nature of the goods in the trim. Aside from perfumes there were soaps, toilet waters, and a few tooth preparations. In the rear, somewhat elevated, were seen several pieces of cut glass. The display caused no little comment.

A Retail Druggist's Catalogue.—

The Jacobs' Pharmacy Co., of Atlanta, Ga., is the



The mail-order catalogue of Jacobs' Pharmacy Co. of Atlanta.

well-known retail drug house established by Joseph Jacobs. The company now owns and conducts a chain

of ten or twelve stores, having recently taken over the three pharmacies of T. H. Brannen. Among other things, quite a large mail-order business is done—so much so as to justify the publication of an illustrated catalogue containing no fewer than 144 pages. Here are listed proprietary medicines, toilet articles, brushes, combs, stationery, leather goods and salable material of a thousand and one kinds. The illustrations are mostly devoted to the line of specialties bearing the label of the Jacobs Pharmacy Co. From the preface of the book we find that 5 per cent rebate checks are given with every purchase made in person or by mail. These checks are accepted in payment for any of the Jacobs laboratory products or for anything in the art and gift department.

A second and much smaller catalogue is gotten out for the illustration and description of rubber goods and sick-room supplies. This is of such size that it can be slipped into an ordinary envelope or enclosed in packages leaving the counter. It contains 36 pages and cover.

A Candy Order Blank.—

Often a customer comes into the store, buys a box of candy, and asks the druggist to send it out of town. Here is a blank that will be found very

**Good Thoughts and Good Eating
Make Life Worth Living**

YOU CAN HAVE A BOX OF HAZELWOOD CANDY EXPRESSED TO ANY OF YOUR FRIENDS IN UNITED STATES OR CANADA BY FILLING OUT THE ORDER BLANK BELOW AND LEAVING IT AND THE REQUIRED AMOUNT OF MONEY WITH THE CASHIER

Price of Chocolates 50c, 75c, \$1.00 lb.
Price of Bon Bons 50c per lb.
(ALLOW 10 CENTS PER POUND FOR EXPRESS)

CANDY ORDER BLANK

Date _____ 191__

Please send to

Name _____

Address _____

_____ pound box filled with _____

Amount of money to be paid for candy \$ _____

Express \$ _____

Total \$ _____

Name of Sender _____

Address _____

RECEIPT

Date, _____ 191__ \$ _____

Received of _____

_____ Dollars

for candy to be sent to _____

Signed _____

A candy order blank.

useful in handling such orders. It may be attached to the soda menus by way of advertising. Such a blank should encourage customers of a store to send candy to their out-of-town friends. This specimen was sent to us by Joseph Hart, chief prescriptionist of Powers & Estes, Portland, Oregon.

A Bodemannian Announcement.—

Everybody knows who Wilhelm Bodemann is. He needs no introduction to any audience—least of all to a BULLETIN audience. This is enough, then, by way of explanation. For the rest we leave the accompanying

Of Interest to Hyde Parkers

When you retain an attorney for an important case—you select the best. When you buy a piece of real estate—you go to the most painstaking abstract firm, one you have confidence in. When you or one of your family are seriously ill—no one but the most skilful physician is called in.

Do you use the same care in selecting the careful, competent, reliable Druggist for your Prescriptions and your Household Remedies?

To the newcomer in this section it may be welcome news to know that on

Lake Avenue and 50th Street

is such a Pharmacy.

W. Bodemann has been engaged in Pharmacy in Chicago since 1867. Has in this span of years been called into service where pharmacy was concerned by the National, State, and City government. Lived in Hyde Park in his own home since 1880. Never "substituted," never allowed Bar Practice, and conducts a Pharmacy without the disturbing Soda Fountain nuisance.

If you are in doubt where to buy your medicines, ask the older residents or any physician in this city—who know that we don't substitute—inferior for genuine—Drugs. You always get what you pay for.

Julius H. Schroeder, who has been with me since 1894, is on hand when I am not, and—who doesn't know Julius?

Phone your orders. We call for and deliver prescriptions promptly.

W. Bodemann,
The Hyde Park Pioneer Druggist.

Telephone Oakland 561.

announcement to tell its own story. Wilhelm got this out recently in his constant search for more business. We venture to say that the Hyde Parkers flocked to the Bodemann-pharmacy in droves after getting the circular and reading it.

By-products.—

Naphtha acid is an ill-smelling by-product obtained in the manufacture of kerosene and lubricating oils. It has been used to a small extent in cheap soaps, but its disagreeable odor has caused most of it to be thrown away. Recently a method has been found of eliminating this odor, and the "acid," which has strong detergent properties, is now an important substance for soap-making.

PRACTICAL PHARMACY

New Formulas for the N. F.—

Here are some of the proposed formulas for the forthcoming edition of the National Formulary:

LIQUOR PICIS CARBONIS.

(Liquor Carbonis Detersens. Coal Tar Solution.)
 Coal tar200 Gm.
 Quillaja in No. 20 powder.....100 Gm.
 Alcohol, a sufficient quantity to make..1000 Cc.

Mix the coal tar and quillaja with 700 Cc. of alcohol and macerate during seven days in a closed vessel with occasional agitation. Then filter and wash the contents of the filter with a sufficient quantity of alcohol to make the product measure 1000 Cc.

SYRUPUS AMMONII HYPOPHOSPHITIS.

(Syrup of Ammonium Hypophosphite.)
 Ammonium hypophosphite.....35.5 Gm.
 Diluted hypophosphorous acid.....2 Cc.
 Distilled water100 Cc.
 Glycerin100 Cc.
 Compound spirit of vanillin.....2 Cc.
 Syrup, a sufficient quantity to make..1000 Cc.

Dissolve the ammonium hypophosphite in the distilled water, add the diluted hypophosphorous acid, filter, and then add the glycerin, compound spirit of vanillin, and sufficient syrup to make the product measure 1000 Cc.

TINCTURA DELPHINII.

(Tincture of Larkspur.)

Larkspur seed, in No. 30 powder.....100 Gm.
 Alcohol, a sufficient quantity to make..1000 Cc.

Moisten the powdered larkspur seed with a sufficient quantity of the alcohol and pack it firmly in a cylindrical percolator and pour on enough alcohol to saturate the drug and leave a stratum of liquid above it. When the liquid begins to drop from the percolator, close the lower orifice, cover the percolator, and macerate for six hours. Then allow the percolation to proceed slowly until 1000 Cc. of tincture is obtained. Rarely used internally, but is commonly employed externally to destroy parasites.

OLEUM RICINI AROMATICUM.

(Aromatic Castor Oil.)

Saccharin0.5 Gm.
 Oil of cinnamon.....1.5 Gm.
 Vanillin1 Gm.
 Cumarin0.1 Gm.
 Alcohol40 Cc.
 Castor oil, a sufficient quantity to make..1000 Cc.

Dissolve the oil of cinnamon, saccharin, vanillin, and cumarin in the alcohol and all the castor oil and mix thoroughly.

A Liquid Shampoo Soap.—

P. Henry Utech told the members of the Pennsylvania Pharmaceutical Association convened at Bedford that he has found a "Liquid Aromatic Shampoo Soap" a good seller.

"The formula," said Mr. Utech, "is one suggested by Wilbert some years ago, with but a slight modification. Numerous experiments were carried out with the ordinary fixed oils, such as linseed, sesame, Malaga olive oil, and mixtures of these with cottonseed oil, but all were found to be objectionable for some reason or other.

"The formula now used is as follows:

Sodium hydroxide.....80 grammes.
 Potassium hydroxide.....80 grammes.
 Cottonseed oil1000 Cc.
 Alcohol500 Cc.
 Water, sufficient to make.....2500 Cc.

Dissolve the hydroxides in 500 Cc. water. After solution has been effected, add the alcohol, and finally the cottonseed oil, in several portions, and shake thoroughly. Allow to stand for several hours, shaking the mixture occasionally, until thoroughly saponified. Finally add water sufficient to make 2500 Cc.

To the soap liquid thus prepared add:

Potassium carbonate.....50 grammes.
 Terpeneol12 Cc.
 Evergreen "A" sufficient to produce a grass green color.

"This soap can be made at a cost of about 75 cents

per gallon. Dispense in four-ounce bottles at 25 cents. The trade packages of similar products seldom contain more and retail at 50 cents, a good talking point. By putting a little personal push back of this product, it can be made into a very profitable specialty."

Incompatibility Between Internal and External Applications.—

"Quite a little attention," says the *Practical Druggist*, "is directed by the medical press at present to the recently proved fact that there is sometimes an epidermal manifestation caused by the incompatibility existing between a medicine given internally and one applied externally. Reference is made to a case in which hydrogen peroxide was applied externally while potassium iodide was given internally. The result was a severe burning in the skin, the cause of which was not at once discernible. In another instance a colorless tincture of iodine taken internally while an ointment of ammoniated mercury was applied externally, caused severe skin irritation attributed to the toxic action of mercuric iodide. Again, sulphur internally and a solution of mercury used externally may be expected to cause a deposit of black mercuric sulphide in the skin.

"These and numerous other instances should be sufficient to impress both physician and pharmacist with the importance of avoiding such incompatibilities."

Cleaning Plate Glass.—

At the last meeting of the Pennsylvania Pharmaceutical Association Charles S. Herron treated briefly the subject of cleaning plate glass. He said:

"Most pharmacists, who are located in regions where the illuminating medium is natural or artificial gas, have experienced considerable difficulty with a peculiar greasy deposit on plate-glass windows, mirrors, etc., which gives to them a bluish appearance regardless of the amount of energy expended in the cleaning.

"If after having followed the ordinary procedure of cleaning a piece of glass, a small sack be made of coarse cheese-cloth and filled with lampblack and the glass thoroughly polished with this, and then polished with a clean cloth, it will assume a brilliancy unobtainable by any other means."

Aromatic Elixir.—

Thos. A. Egan suggested a new method of making aromatic elixir at the last annual meeting of the Pennsylvania Pharmaceutical Association.

"This elixir," said Mr. Egan, "may be made according to the U. S. P. But with the following exceptions a more elegant aroma can be obtained: Take of the oils the required amount to make compound spirit of orange, U. S. P., and dissolve them in the alcohol. Put this solution in a refrigerator (the fountain may be used) and allow the solution to remain forty-eight hours. I find the oils blend with a more fragrant aroma than when strictly following the U. S. P.

"Remove the solution from the refrigerator and let it stand at the temperature of the room for twelve hours. Now follow the directions as given in the U. S. P.

"The preparation when made this way retains the same aroma for a longer time than when made by any other process I have ever tried."

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Nuggets of News.—

During convalescence from typhoid fever there is considerable loss of muscle tissue.

Barley and malt contain no less than eight different enzymes, including rennin and tyrosinase.

Light reduces mercuric chloride solutions when weak. They should be dispensed in amber bottles to prevent this.

The oldest perfume recorded is Ladanum, a resinous exudation of the purple rock-rose of Crete.

Alcohol has been produced from waste paper-pulp at a cost of 10 cents per gallon.

A chemically active nitrogen is produced by electric sparks which combines with other substances much more readily than ordinary nitrogen.

Typhoid fever is much more prevalent in the United States than in Europe, due to more careful water-treatments in the latter country.

It is estimated that the number of electrons in an atom is eight times the atomic weight.

A thunderbolt is supposed to consist of O_3 formed by the electric discharge from the clouds.

It is estimated that the water-power of the United States amounts to fourteen and a half millions of horse-power.

German chemists have demonstrated that iridin and euonymin have no effect on the secretion or composition of bile.

Morphine reduces the digestive power of the stomach and also delays digestion.

Rattlesnake poison is thought to be a body of phenolic character. It is free from nitrogen and forms only a very small part of the liquid venom.

A volcano in the Philippines emits a lava which makes glass by the simple addition of lime. A factory has recently been started for making glass articles.

Ours are Brass and Wood.—

The high and increasing price of platinum has caused a search for substitutes therefor in standard weights and measures. Tantalum has been found a satisfactory substitute for weights, and silica for measures. The marked ends of the silica are coated with a thin layer of platinum, on which the terminal marks are made.

The Enduring Sour!—

Glycerophosphates are not easily changed to phosphates and glycerin, particularly in the presence of acids. A high temperature (100° C.) favors the change, and a very slight acidity also, but with a marked acidity and a low temperature the glycerophosphates are quite stable.

Dott Says—

Strychnine hypophosphite is one of the most soluble of strychnine salts. It dissolves in about 3.3 parts of water at ordinary temperature. It crystallizes with three molecules of water. Dott's so!

It Forms the Habit.—

In the rusting of iron, not only is the iron chemically changed, but all the impurities in the iron are also changed. Sulphur and phosphorus are oxidized to acids, carbon to carbon dioxide, in part, and to graphite in part, etc. Hence when rusting commences the acid products formed promote its extension.

Artificial Sponges.—

A new kind of artificial sponge, which swells and softens in water like the natural animal, is made by treating cellulose with zinc chloride until a pasty mass is formed, then mixing this with salt, pressed in a spiked mold, and removing the salts by washing.

Ureal Combination.—

Hydrogen peroxide combines with urea, yielding a powder which is soluble in alcohol and in water. On heating the solution to 60° C. it is decomposed, and oxygen is liberated. The compound is now in the market under the name of "Hyperol."

The Boy's Appetite.—

A Philippine chemist says that a growing animal which receives only sufficient food to keep up its body weight or a little more, is in a condition of severe starvation, because the skeleton grows at the expense of the rest of the body.

Better Left Unsaid.—

Indole, which is one of the chief odorous principles of feces, has been found in orange and lemon blossoms and in one species of coffee flowers. Skatol, another intense and unpleasant fecal odor, has been found in nectandra flowers.

Infusion of Digitalis.—

Focke says that a one-per-cent infusion of digitalis leaves represents 80 per cent of the activity of the leaves, and a 10-per-cent infusion extracts 74 per cent of the activity. He recommends the latter for medicinal use—complete extraction making too dilute a preparation.

To Boom the Soda Fountain.—

Soda water is slightly antiseptic and will reduce the number of living germs in it on standing, but it does not become sterile. Typhoid germs are more sensitive than most others, but even these survive in part.

The Colloid Dictionary.—

Barry defines a colloidal solution as a liquid holding in suspension sponge-like solid-liquid particles, the attraction between solid and liquid being balanced against the elasticity of the solid and the surface tension.

This Applies to Water Only.—

A number of investigators unite in advocating copious water-drinking during meals. They find that it stimulates gastric secretion and lessens intestinal putrefaction. Digestion is better for it.

Artificial Boards.—

Sawdust is mixed with a paste of magnesia, magnesium chloride, and water, and pressed into boards. When the magnesium cement has set, semiartificial board is obtained which makes a superior flooring.

BOOKS

A NEW EDITION OF "PHARMACEUTICAL FORMULAS."

Often our readers ask the name of some standard book on pharmaceutical recipes. We therefore embrace this opportunity of reviewing an excellent work of that character, *Pharmaceutical Formulas*, published by the *Chemist and Druggist* of London.

This book, now in its eighth edition, is full of up-to-date information on the composition of pharmaceutical and toilet preparations. The text has been carefully revised. There are 450 alterations and annotations, while new formulas to the number of 400 or more have been added. The chapter on toilet preparations is itself worth the price of the book. Many pages are also devoted to insect and other pests that infest plants. This chapter has been rewritten, the purpose being to give pharmacists material help in cultivating business in remedies that are used to destroy parasites on plants. Another new feature is a monograph on modern skin creams with abundant formulas. The section on perfume treats of the composition, properties and blending of synthetic perfumes, which should be of service to those who like to experiment with new odors.

Many other notes of interest have been added bearing on the subjects of cosmetics, beverages, culinary recipes, miscellaneous household requisites, varnishes, polishes, and pharmaceutical preparations. The price of *Pharmaceutical Formulas* is \$3.50. McKesson & Robbins, of New York, are the American agents.

INFORMATION ON MEDICINAL LEAVES AND HERBS.

The Bureau of Plant Industry of the Department of Agriculture has issued Bulletin No. 219 on the subject of "American Medicinal Leaves and Herbs." The author of the Bulletin is Miss Alice Henkel, who has, it will be remembered, previously prepared two or three other bulletins of the same general character. One of them treated of American root drugs, and another of medicinal barks. Leaves and herbs are considered in the present instance, and, as before, the Bulletin discusses such practical details as the parts of the plants employed, the places where the plants may be found, the purposes for which they are used in medicine, and the prices paid for them. The brochure contains descriptions and illustrations of 36 of the most important plants yielding medicinal leaves and herbs, 15 of which are official in the U. S. P. The illustrations are chiefly from photographs taken from nature by C. L. Lochman. Any one of these three Bulletins may doubtless be had by simply dropping a request to the Secretary of Agriculture, Washington, D. C.

PHYSICIANS' VISITING OR CALL LISTS.

We have received copies of two of the popular physicians' visiting or call lists, gotten out for use during 1912. One is "The Physician's Visiting List" published by P. Blakiston's Son & Co., 1012 Walnut

Street, Philadelphia, and the other is "The Physician's Perfect Call List and Record," published by E. G. Swift, Detroit, Mich. Both of these books have long been popular, and are particularly well suited to those druggists who are looking for something to present their physician friends with at the holiday season.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Deodorizing and Coloring Benzene.

H. E. L. asks: "How do you deodorize benzene? What substance will color gasoline, say, red, green, or blue?"

Prof. W. L. Scoville, writing in the BULLETIN some time ago, said that fibrous or spongy aluminum hydroxide was recommended for purifying benzene, gasoline, etc. The benzene is shaken from four to six hours with the fibrous hydroxide and then filtered. The hydroxide removes the acids in addition to deodorizing the benzene.

Benzene, as well as other petroleum distillates, may be purified by the process of the U. S. P., which is given in Part I of the book. The following is another process: Add to the benzene 1 or 2 per cent of oleic acid, which dissolves, and then $\frac{1}{4}$ per cent of aqueous solution of tannin, which is incorporated by thorough agitation. A quantity of solution of caustic potash or milk of lime sufficient to combine with the acids is then well shaken with the mixture and the whole allowed to stand. The benzene rises to the top of the aqueous liquid, sufficiently deodorized for all practical purposes.

The following process has been patented in Germany for disguising the odor of benzene and other petroleum distillates: Add to the liquid a volatile oil containing a terpene such as oil of turpentine, fennel, caraway, lavender, pine needles, eucalyptus, etc., and then an alkali. If the benzene be mixed with 1 per cent of oil of fennel, warmed to 70° C., then agitated with 2½ per cent of solution of soda, specific gravity about 1.30, and allowed to stand till the benzene separates from the aqueous liquid, the former will have merely an odor of fennel.

To color gasoline, use an oil-soluble dye. It can be obtained from Theodore Eaton & Son of Detroit or any dye house. Alkanet root has also been recommended for the purpose.

Elixir Lactated Pepsin, 80 Grains.

J. F. R. writes: "I want some information about elixir lactated pepsin, 80 grains. Suppose a prescription specifies 80 grains of lactated pepsin to the fluidounce of

elixir. Such a formula will call for far less pepsin itself than 80 grains, as several other ingredients beside pepsin enter into the composition of lactated pepsin. The apparent discrepancy I think has been explained by you before, but I have forgotten it. How is it that so much lactated pepsin appears to be present?"

Lactated pepsin is a compound of several ingredients. For use in an elixir it may be made after the formula of compound powder of pepsin N. F., in which the milk-sugar has been omitted. Having made this compound powder, leaving out the milk-sugar, take from it the equivalent of 80 grains of the complete formula, and dissolve that equivalent quantity, in proper proportions, in a red aromatic elixir. Use the elixir base suggested in compound digestive elixir N. F. Having made both the lactated pepsin without the milk-sugar and the vehicle, one can prepare elixir of lactated pepsin of any strength.

Dehydrating Alcohol.

A querist asks: "Can alcohol be dehydrated by copper sulphate? If so, what is the chemical reaction?"

Anhydrous copper sulphate is used to detect water in alcohol. Exposed to moisture it turns blue. But there is no chemical reaction. The salt merely takes up water of crystallization. While copper sulphate is thus used in a test, it would not be wise to conclude that alcohol can be dehydrated in this way. That method would not be practical. Better let the alcohol remain in contact with lime over night and then distil carefully. The distillate will contain less than one per cent of moisture. Copper sulphate would not prove

any more efficient. In fact, while more expensive it would hardly be as effective. No chemical short of metallic sodium would remove all the water.

In Squibb's *Materia Medica* we read of absolute alcohol containing only 0.2 per cent of water, although the *Pharmacopœia* admits a limit of one per cent. In its preparation, the purest grade of alcohol is slowly percolated through dehydrated lime and rectified by redistillation, giving a product which runs about 99.8 per cent strength. It contains no empyreumatic impurities and complies with all official tests.

Galenical Preparations of Creosote.

H. W. M. has been having trouble with a creosote compound. He writes: "Several of our physicians are prescribing a cough syrup of:

Morson creosote	16 drops.
Alcohol	1½ fluidrachms.
Water and syrup, enough of each	
to make	2 fluidounces.

"I dispense this mixture by the quart. I have tried every conceivable way to make a clear solution without success. I have tried rubbing it with magnesium carbonate, filtering with sodium phosphate, filter-paper, pulp, albumen, and talc, but the filtrate is turbid. It is clear at first, but turns cloudy again. Can you suggest a way of keeping it clear?"

We are not familiar with Morson creosote. But creosote and its synthetics resist solution in water. To make a galenical preparation calls for an excessive amount of alcohol. But one can dispense an emulsion. In fact the emulsion offers the only means of presenting creosote or its synthetics in therapeutic quantities in a permanent fluid. The clear preparations are not apt to



SOME COMING PHARMACISTS.—This interesting group of young men represents the junior class of the School of Pharmacy of the University of Illinois. The picture was taken in Grant Park near the school. General Logan, the figure in imperishable bronze back of and above the class, is spurring the boys on to a life of energetic determination and ultimate victory. Professor W. B. Day may be seen at the rear of the picture—the fourth standing figure from the left.

contain more than very small amounts of creosote. For further information along this line consult the annual index of the December BULLETIN, 1911, for creosote elixir and emulsion.

Almond Lotion and Cream.

L. E. S.—We do not know the composition of the proprietary mixture which you mention. The following formulas of almond toilet preparations have been suggested:

ALMOND LOTION.

Blanched almonds	4 ounces.
Curd soap	½ ounce.
Oil of bitter almonds.....	10 minims.
Oil of bergamot.....	1 drachm.
Rectified spirit	4 ounces.
Orange-flower water	12 ounces.

Dissolve the soap in the water by warming, and add it gradually to the almonds beaten up in a mortar. Strain, and add the oils dissolved in the spirit. Mix well.

ALMOND COSMETIC CREAM.

Blanched almonds	1 ounce.
Rose-water	4 ounces.

Beat the almonds to a paste and add the rose-water; strain, heat to boiling point, and add:

White wax	1 ounce.
Almond oil	2 ounces.
White Castile soap.....	1 ounce.

Mix thoroughly and add:

Saturated boric-acid solution.....	2 ounces.
Eau de Cologne.....	1 ounce.
Oil of bitter almonds.....	4 minims.
Oil of rose-geranium.....	5 minims.
Glycerin	1 ounce.

Removing Scorch Stains.

A. J. J. submits the following query: "Do you know of any liquid which will eradicate burnt spots from clothes caused by tailors while ironing? I have tried hydrogen peroxide, acetone, ammonium hydroxide, and acids with unsatisfactory results. Still there is a liquid that does the work and resembles the first two substances in taste, odor, and appearance."

Scorch stains are sometimes removed as follows: "From silk goods with potassium permanganate followed by sulphurous acid, or hydrogen peroxide; from woolen goods, by hydrogen peroxide; from cotton and linen goods, by hydrogen peroxide or sodium hypochlorite." The foregoing we have quoted literally from the books, but it would seem apparent that *solutions* of these chemicals are intended.

Suppose you try on a restricted portion of the cloth, in an experimental way first, a dilute solution of chlorinated soda. That ought to be effective. Having removed the stain, wash with water. Of course care must be exercised lest the dye in the fabric be removed.

Sour Milk at High Altitudes.

L. L. submits an interesting query. He writes: "Will you please publish a formula for making sour milk? A lady customer living at an altitude of 6000 feet claims that she cannot sour milk in the ordinary way in her home."

Of course all forms of life diminish as we go higher. At the elevated spot where the querist lives, there may be an absence of sour milk bacilli. But the germs may be bought in tablet form from certain phar-

maceutical houses. Planted in milk free from preservative, and allowed to stand in the room over night, they produce lactic acid, yielding fresh, pure buttermilk. The subject is too big to discuss further here, but houses like Parke, Davis & Co. will be glad to send literature and samples for trial.

Clarifying Lime Juice.

I. X. L. complains that West India lime juice is shipped in large hogsheads very dark and unfiltered. He wants a process for clarifying the liquid.

This may be clarified by heating it either alone or mixed with a small quantity of egg-albumen, in a suitable vessel, without stirring, to near the boiling point of water, until the impurities have coagulated and either risen to the top or sunk to the bottom. It is then filtered into clean bottles, which should be completely filled and closed with pointed corks, so that each cork has to displace a portion of the liquid to be inserted. The bottles are sealed and kept at an even temperature, preferably in a cellar. In this way the juice may be satisfactorily preserved.

Making Ten-per-cent Sulphuric Acid.

S. M. M. writes: "Given 92.5-per-cent sulphuric acid, how can a pint of ten-per-cent acid be made?"

It can be made as follows:

1 pt. = 473.2 Cc.
Sp. gr. 92.5% sulphuric acid 1.826 (U. S. P.).
Sp. gr. 10% sulphuric acid 1.067 (U. S. P.).
473.2 Cc. 10% sulphuric acid at a sp. gr. of 1.067 = 504.7 grammes
= 50.47 grammes absolute sulphuric acid.
50.47 divided by .925 = 54.56 grammes, 92.5% sulphuric acid.
54.56 divided by 1.826 = 29.88 Cc. 92.5% sulphuric acid.

By reference to the table of weights and measures in the U. S. P., we find that 29.57 Cc. = 1 fluidounce, and the difference between this and 29.88 Cc., which is 0.31 Cc., can be calculated from this table as approximately 5 minims. Therefore, 1 fluidounce, 5 minims, is the required answer.

For all practical purposes 1 fluidounce of sulphuric acid can be diluted to make 1 pint of 10-per-cent acid, the exact percentage by this dilution being 9.9 per cent.

An Ink Eradicator.

J. E. M. wants a good process for removing ink stains from clothing. We have published several formulas of this character, but the following method is probably the most practical:

If the clothing is white use sodium hypochlorite solution with acetic acid. If the clothing is colored use a solution of oxalic or citric acid. Sodium hypochlorite, being a bleaching agent, is apt to remove the dye in the fabric as well as the ink.

Consult previous issues of the BULLETIN for other processes.

Softening Celluloid.

A. S. wants to know how to bend celluloid so that it will stay bent.

If celluloid is warmed in a bath in boiling water it

will be possible to bend it. That statement is made in "Henley's Book of Formulas," but it would be advisable to write some manufacturer of celluloid collars or celluloid novelties for further information. We do not know what process is used in the factories to bend celluloid. It may be wise to add that when celluloid is exposed to a flame, it undergoes a very active combustion.

Saturated Solution of Potassium Nitrate.

G. H. D. asks: "How would you fill a prescription for 8 ounces of saturated solution of potassium nitrate?"

Take 1 ounce of the salt, dissolve it in 3.6 ounces, by weight, of water, for the Pharmacopœia says potassium nitrate is soluble in 3.6 parts of water. Measure the resulting volume and calculate how much more of this salt solution is necessary to make 8 fluidounces.

An Herb Tablet.

R. E. S.—We do not know the composition of the proprietary preparations which you mention, but an herb tablet may be made after the following formula:

Powdered aloes	$\frac{1}{2}$ grain.
Powdered podophyllum	$\frac{1}{4}$ grain.
Powdered rhubarb	$\frac{1}{4}$ grain.
Powdered senna	$\frac{1}{4}$ grain.
Powdered gentian	$\frac{1}{4}$ grain.
Powdered nux vomica	$\frac{1}{4}$ grain.
Powdered lappa	$\frac{1}{8}$ grain.
Powdered taraxacum	$\frac{1}{8}$ grain.
Powdered berberis aquifolium	$\frac{1}{8}$ grain.
Powdered licorice root	$\frac{1}{4}$ grain.
Powdered xanthoxylum bark	$\frac{1}{8}$ grain.
Powdered buchu leaves	$\frac{1}{8}$ grain.

Fluidextract of Black Haw Not Aqueous.

R. L. C. asks: "Please tell me how I can mix fluidextract of black haw with water. What proportions are used?"

We presume you mean black haw. We know of no such drug as black hair. We do not consider it possible to mix fluidextract of black haw with water and obtain a clear solution, for the drug is made with an alcohol menstruum. Of course the mixture may be filtered clear, but we doubt whether the filtrate would be of much therapeutic value.

Unna's Ointment.

A. B. P. wants the formula of Unna's ointment.

Unna was responsible for so many formulas that we hesitate to say which one definitely answers to the name specified. Unna's Sulphurated Zinc Paste, N. F., has an ointment base, but we cannot with any degree of certainty say just what preparation is called Unna's ointment.

R. M. S.—The composition of phosphorous rat paste was discussed at some length in this department of the November BULLETIN, 1910, on page 480. Suppose you consult that issue. We hesitate to take the subject up again so soon afterwards.

GENERAL ESSAYS

ESSAYS IN BRIEF.

"No man is a hero to his valet." Why? Partly because, in the intimacy of this relation, the hero, who is after all only a man, discloses many traits that are very commonplace and far from heroic, but more particularly because the valet is a valet with only a valet's comprehension. You cannot expect him to see elements of greatness which are utterly beyond his grasp.

Do every piece of work the best you know how—strive always to do a given thing better than anybody else can do it. Never mind if you aren't getting sufficiently paid for it. If there is anything that gives me an attack of mental colic it is the man—and the woods are full of him—who is always crying out that he isn't paid what he is worth and that he isn't going to kill himself until his employer does the square thing.

A man should always do his level best, not merely because it pays in dollars and cents, not merely because it will increase his salary and in time get him a better place, but because—and this is far more important in the long run—it *develops power and ability in the man himself*. Capacity grows by what it feeds upon. Men grow strong by using their strength. Nothing develops power but the constant exercise of it.

In this democratic country of America men get just what is coming to them—sooner or later. The reason why most of them don't get more is because they aren't worth it—they are in the way—they are barnacles on the ship. Let a man make good and he will land on his feet every time—he needn't worry about that. The country is looking for him—waiting for him to appear. Employers are up in the conning tower scanning the horizon with telescopes, and good men are snapped up so quick it makes them dizzy.

H. B. M.

FOOT-RULES FOR MEASURING CHARACTER.

In New England: "What do you know?"
In New York: "How much y' got?"
In the South: "Who are you?"
In the West: "What can you do?"—*Life*.

Not one of these foot-rules will take the measure of a man, though the last one would come the nearest to it. Here is a yardstick that would do more accurate work than all of them:

"What are you?"

Are you a "decent" man? Do you act the square deal in every relation in life? Have you the manners of good breeding? Can you qualify for the best positions in the community? Have you got the brains and the ability and the character?

Yes? Then it doesn't matter, in the least what university, if any, you were graduated from, whether you know your Browning or not, how large your pile is, who your great-grandfather was on your mother's side, or how many flabby and impecunious dukes are after your youngest daughter.

You yourself—that's what counts. *What are you?*

H. B. M.

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THE MONTH'S HISTORY

THE RICHARDSON BILL.

The Richardson bill to amend the food and drugs act has caused a lot of discussion lately in the drug trade. It will be recalled that the Supreme Court of the United States held last year that the present act could not be made to apply to false and misleading statements regarding the therapeutic claims made for medicinal preparations. Since then there has been a wide-spread desire to so amend the law as to correct this omission and shortcoming.

The Richardson bill is one of several measures which seek to remedy the situation. It seems, however, to go farther than some individuals and interests in the trade think it ought to go. Primarily, of course, it brings remedial claims within the scope of the food and drugs act, and it does this whether the

claims are made on the label or even in advertisements, posters or circulars. It also seems to restrict to registered pharmacists and physicians the manufacture of all medicaments—which would apparently give the two professions a monopoly over the patent medicine business. Then, too, it greatly increases the number of drugs, the content of which must be mentioned on the label, and it provides that not only must the presence of these be indicated, but the names must also be given of the parent substances from which they are derived.

As we have intimated, there seems to be a wide difference of opinion over the merits and desirability of this bill. Some of the editorials we have seen in the pharmaceutical press, however, have manifestly been based on a misreading of the measure. From a grammatical and rhetorical standpoint, it is very loosely and poorly drawn, and one can scarcely be blamed for failing to know what it all means. We aren't perfectly sure we are right ourselves!

* * *

THE ANTI-NARCOTIC DECISION.

A good deal of discussion has resulted, too, from the contemplated ruling or decision of the Board of Food and Drug Inspection regarding the importation and sale of opium, morphine and cocaine. This was issued tentatively some weeks ago, and it is generally understood that it will become official, though perhaps with modifications, after the interests involved have had an opportunity to express their opinions and perhaps utter their protests. In a word, the decision would, if officially adopted and subsequently upheld by the courts, practically be tantamount to an interstate anti-narcotic law. In effect it would do pretty much all it was sought to accomplish by means of the Foster bill at the last session of Congress.

It provides that all dealers must keep careful records of their sales of the proscribed narcotics except when dispensed on the prescriptions of authorized medical, dental and

veterinary practitioners. It limits the sale of narcotics absolutely to medicinal purposes. It declares that every package containing any of the specified drugs shall bear a red label containing the word "Poison" and the skull-and-crossbones device. The revenue feature of the Foster bill is of course absent, since this could not be incorporated in a mere decision or ruling of a governmental bureau or department.

Offhand this document would seem to do little more than take one of our numerous State anti-narcotic laws and make it national or interstate in character. It does go a step farther, however, in compelling the keeping of records of all sales. On the other hand, though, it is not as rigid as some of the State laws in that it does not absolutely restrict the sale of narcotics to physicians' prescriptions. Certain it is that we need something in the way of an interstate narcotic law, and until we get it the State acts are very seriously nullified. Whether this decision will provide a remedy, whether the Foster bill is what we want, or whether something quite different from either is indicated, remains to be worked out. For ourselves, we look upon the keeping of records as an intolerable nuisance, especially to the large manufacturers and jobbers, and we do not see any compensating advantage.

* * *

TO AMEND THE SHERMAN ACT.

While speaking of national legislation and contemplated national legislation we are reminded that Frank H. Freericks, who in the illness of Judge Errant is doing legal work for the N. A. R. D., has drawn up an amendment to the Sherman anti-trust law. This strikes us as being exceedingly sensible. We went on record editorially a month or two ago as believing that under the present Sherman act any price protection plan which the N. A. R. D. might devise, no matter how clever or ingenious, would in all probability be declared invalid by the courts. The only sure remedy is to amend the law itself.

We are not able at this writing to give the provisions of Mr. Freerick's contemplated amendment. It will not be published until it has been carefully considered by the different members of the Executive Committee. Its probable purpose, however, is to exempt retail merchants and the organizations of labor, in their coöperative and defensive methods, from

the application of the Sherman law. The N. A. R. D. is not alone in asking for such an exemption. Organizations in other lines of retail trade have taken much the same position. We have before us, for instance, an appeal to Congress from the National Federation of Retail Merchants, asking relief from the hampering influence of the Sherman act.

From all these directions it has been declared that there are many price-agreements and restrictions upon trade which are really beneficial to the public welfare; that they serve to protect the great majority against the aggressions of a powerful and selfish minority; that the unbridled Sherman law really drives out free competition while it seems theoretically to protect and preserve it; and that some concession must be made to the thousands of retail merchants in all lines of trade who are seeking to protect themselves honestly against destruction. Whether a discrimination in favor of retailers or laborers would be constitutional we leave others to determine, but it seems as if something might be done, by one method or another.

* * *

A year ago our readers were fully informed of the amalgamation of interests which had been agreed upon in New York City between the Hegeman Corporation and the William B. Riker & Son Co., both of them owners of chains of retail drug stores. Not until last month, however, was the consolidation legally completed. The Riker-Hegeman Co. is incorporated under the laws of the State of New York for \$15,000,000—which is quite an investment for one company to have in the retail branch of the trade!

We do not know just how many stores are owned by the corporation, but we are under the impression that there are over 60 of them, and the purpose is to add new ones to the chain from time to time as strategic points may be found. It was said some months ago, for instance, that a scout for the company had been looking over the field in Chicago, but in that instance had decided to stay out. Most of the Riker-Hegeman establishments are located in New York City, Brooklyn and Boston, but new ones have been opened during the last year in Paterson, N. J., Bridgeport, Conn., and Worcester, Mass.

The other big chain of retail stores is that

conducted by Louis K. Liggett and the United Drug Co. There are something like 40 stores in this group. The original plan was to have these included in the Riker-Hegeman amalgamation, but the effort fell through. Last month it was rumored that the Liggett interests had finally been pacified and absorbed, but this was vigorously denied by Mr. Liggett himself. It would seem that those two big chains of retail drug stores will be competitors of one another instead of otherwise.

In the meantime the United Drug Co. has succeeded in getting hold of its own stock formerly held by the Riker Company, so that Mr. Liggett is apparently free to take over the sale and promulgation of Rexall goods in New York and Brooklyn himself. He will do this by means of a number of stores which he proposes to open and conduct under the ægis of the United Drug Co.

* * *

THE TIPPING NUISANCE.

We observe that the commercial travelers of the country are at last making a determined stand against the tipping nuisance. They have been muttering and growling for years, but now they are beginning to do something. Here in Michigan an organization of traveling salesmen passed some pretty strong resolutions at its annual meeting a few weeks ago. More recently the Commercial Travelers National League, meeting in New York City, definitely decided to stop tipping hotel help, barbers, Pullman car porters, and everybody else. P. E. Dowe, president of the League, declared that "from now on the crusade against tipping will be waged in earnest, for we realize that the time to break the chains which bind is now or never!"

There is no doubt at all that the tipping evil is a national curse. To give a man 10 or 25 or 50 cents for doing something for you which he is not expected or otherwise paid to do, is not only a pleasure but a real obligation. On the other hand, to pay a horde of self-seeking hotel and railway menials for services for which you have already paid their employers handsomely, is in the abstract a rank shame and injustice. There is no real excuse for it. The worst of it is, many of the proprietors of the very best and most expensive hotels pay their help little or nothing on the supposition that the easy-going public will do it for them.

THE A. PH. A.

Elsewhere in this issue of the BULLETIN we are reporting upon the election of Prof. W. B. Day to the presidency of the American Pharmaceutical Association, and we are reproducing Professor Day's portrait and making some mention of the man himself. In this place it might be well to give the names of other officers for 1912-13 elected by the recent referendum carried on through the mails: First vice-president, Charles M. Ford; second vice-president, Caswell A. Mayo; third vice-president, C. H. Packard; members of the council: William C. Alpers, F. C. Godbold, and L. E. Sayre. The term of office of these men does not begin until the completion of the Denver meeting in August.

In the meantime we are reminded that the first issue of the *Journal of the American Pharmaceutical Association* made its appearance last month. Editor-Secretary James H. Beal is certainly to be congratulated on the showing. It is very evident that we are going to have in the *Journal* a high-class, carefully edited, progressive, thoroughly representative organ of scientific and professional pharmacy. But it will be no academic graveyard, as those who know Professor Beal can well believe. Red blood-corpuscles are not and will not be found wanting. It is made clear in the leading editorial, however, that the *Journal* will not attempt to enter the field served by the general pharmaceutical press, but will limit itself to the discharge of its mission as the official organ of the association, and to the promotion of the association's various and growing interests. Only "aseptic" advertising will be admissible, and if subscribers outside the association membership are secured, it will be for the purpose of increasing the membership of the organization itself.

* * *

MISBRANDED CASTILE SOAP.

In this department of the BULLETIN for December we dwelt briefly on some of the findings which had been made by Charles M. Ford in his capacity as drug inspector for the State of Colorado. We spoke, among other things, of a brand of Castile soap which was largely sold in the Denver market, but which, being made from cocoanut oil, was legally unsalable under the pharmacopœial title of "Castile soap." A Denver subscriber, who for

some reason does not attach his name to the communication, asks us rather belligerently why we did not mention the brand of the soap and the name of the manufacturer. We have since taken the trouble to look up the facts and we find from Mr. Ford's original report that the product he had in mind was "Bocabelli Castile Soap," and that the manufacturers were Jones & Co. of New York City. The point is that Castile soap made from any oil but that gotten from the olive is not in accordance with the pharmacopœial formula, and is therefore misbranded when given a pharmacopœial title. It may be legally sold in Colorado under some other name, but not under that prescribed in the U. S. P.

* * *

**PROFESSOR
CASPARI
WATCH-ED.**

Charles Caspari, Jr., for nearly 20 years general secretary of the A. Ph. A., was very pleasantly surprised a few weeks ago. It will be recalled that when Professor Caspari withdrew from the secretaryship at the Boston meeting last August, and refused a reelection, it was voted by the Council to present him with a set of handsomely engraved resolutions of appreciation. Professor Remington, chairman of the Council Committee charged with the duty of getting up the resolutions, presented them to Professor Caspari not long ago at a little meeting held at the Hotel Stafford in Baltimore. This part of the programme, while thoroughly delightful, was after all expected, but the surprise to Professor Caspari came when he was afterwards presented with a gold watch and jeweled fob. These were the gift of 20 friends—some of the older members of the association who had done team work with the general secretary for so many years. Charles E. Caspari of St. Louis, son of the Professor, was present, and the occasion was one long to be remembered.

* * *

**'PHONE
CONDITIONS.**

At this writing the telephone situation in New York City does not seem to have been corrected. So far the company has not conceded what the druggists want. The telephone people have announced a reduction in commissions from 20 to 10 per cent, and the druggists are insisting upon 30 per cent. The newly established Pharmaceutical Conference, representing all of the local associations, is

making a systematic canvass to get every druggist in Greater New York to sign a promise to make no contract with the telephone company until the completion of pending negotiations entered into by the Conference Telephone Committee. There has even been talk of throwing out the 'phones unless the company came to terms. If the druggists stand together, as they are apparently doing, they can certainly get what they want—or at least what is reasonable.

* * *

**TWO NEW
DRUG CLUBS.**

Last month we had something to say about the formation of the St. Paul Drug Club. Now we find that a similar drug club has also been organized in the Twin City of Minneapolis. Both of these clubs were primarily gotten up for social purposes, and each of them hopes soon to be able to support club rooms or other quarters. Active campaigns for the increase of membership are under way. The St. Paul Drug Club has outlined a series of dances, card parties, and the like to follow one another every two weeks during the winter, hoping in this way to get the families of the druggists together and to develop a social spirit among them. Ultimately, of course, both organizations will be in position to undertake legislative or other activities if such things become necessary. Why wouldn't such a drug club be a good thing in every city?

* * *

**P., D. & CO.
IN EUROPE.**

We observe from reports in the pharmaceutical journals of London, England, that the European office of Parke, Davis & Co. in that city has recently been celebrating its twenty-first anniversary. From the speeches at the banquet it appeared that the total force of employees 21 years ago comprised Manager F. M. Fisk, Assistant Manager H. J. Fisk, and a stenographer. Now the force boasts of 570 people, housed in the European headquarters in London, in the laboratory at Hounslow, in the Russian branch at St. Petersburg, and at other strategic points in the United Kingdom or on the continent, not to mention the South African travelers, who are also under the jurisdiction of the London office. It would seem from these facts that the European business of this American house has grown to considerable proportions.

**BUYING CLUB
FAILURE.**

One of the buying clubs among druggists has gone under. We refer to the Brooklyn Consolidated Drug Co., which has filed a voluntary petition in bankruptcy. It is now declared that the business of the club has been conducted at a loss. The assertion is made, however, that the assets and the bills receivable will cover all the indebtedness. Most of the bills receivable consist of notes of J. C. Wischerth, former manager and treasurer of the organization, and Mr. Wischerth is now being sued. The method of the club was to charge its members wholesale rates for supplies, plus 5 per cent for handling, and it was always said that this advance was sufficient in view of the fact that the business was carried on in connection with the manager's own store and therefore at a relatively slight expense. It would now seem that this was not the fact. Dr. W. C. Anderson was president of the company.

* * *

THE OWEN BILL.

To satisfy the demands of those who feared the curtailment of medical freedom in the establishment of a Federal bureau or department of public health, Senator Owen, the sponsor for the congressional measure proposing the department, has included in the latest draft of his bill a provision that the department shall have no power to regulate the practice of healing or to interfere with personal rights in the selection of medical attendance, and that no discrimination shall be made among medical sects in the appointment of the officials of the department. This will remove the great objection of most of those organizations and individuals who have protested against the establishment of a department of public health at Washington.

* * *

A JOKE?

Well, well, what do you know about this? Here are a number of physicians in Brooklyn circulating a petition asking the public not to patronize drug stores where side-lines are carried! The names of 57 physicians are said to be signed to the petition, and it is reported that 50,000 copies have already been circulated. Where is the man who once said that there was nothing new under the sun! It strikes us that this is a novelty *par ex-*

cellence. We shall not spend time in a vain search to discover any good reason behind this movement. It would scarcely be worth while, and besides we are quite busy this morning. There are some things that we find it hard to take seriously, and we hope the public of Brooklyn is of the same mind.

EDITORIAL

**THE DRUGGIST'S PREPARATIONS UNDER
FIRE.**

In this era of pure food and drug reform the druggists of the country may just as well get ready to expect a more rigid investigation into the character of the medicaments found in their stores. Examinations are from time to time being made in practically every State in the Union, and in some instances the disclosures are not wholly complimentary to pharmacists. Down in Maryland, for instance, the Pure Food and Drug Commissioner is himself one of the conspicuous leaders in American pharmacy—Charles Caspari, Jr. It may well be expected that Dr. Caspari will discharge the duties of his office with friendliness towards the druggist, and without any of the narrowness and intolerance sometimes exhibited by officials ignorant of the real conditions.

At the last meeting of the Maryland Pharmaceutical Association, Dr. Caspari talked for a couple of hours on the conditions as he had found them in the State of Maryland since his appointment as Commissioner. Realizing that it is often an injustice to the druggist to take from his store articles which have been made by somebody else, and then hold him responsible for their character, Dr. Caspari explained that thus far he had for the most part been collecting and investigating the common substances and galenicals which druggists usually prepare themselves—or at least things which, if not made in the store, are easily susceptible of examination by the druggist. He really wanted to see just how far druggists were exercising care in the manufacture and handling of their supplies.

Tincture of iodine was one of the chief products examined, and of this 450 specimens were collected. The net result was the discovery of "an unwarranted degree of laxity on

the part of many druggists in the State." In some cases druggists defended themselves by saying that they did not know that tincture of iodine had to have any definite content of iodine itself, and in other cases they did not understand anything about the necessity of using potassium iodide in the product! In a few cases the tincture was being made by an old formula used in the store for forty years! More surprising still, however, a few druggists got sore after having had these derelictions called to their attention, and they determined "to get even with the Commissioner." Thereupon they made two different tinctures of iodine, one three or four times stronger than necessary, and this they supplied the inspector when he visited the store again, reserving the other for the ordinary demands of trade. How foolish and idiotic this was need not be pointed out. Neither is it necessary to explain that it is quite as bad to have a product too strong as too weak.

The conditions with respect to spirit of camphor were found by Dr. Caspari to be quite as unfortunate. Some of the druggists in the State are still adding from 20 to 25 per cent of water to this preparation. This makes it depart from the pharmacopœial standard, and it may not therefore be sold under the pharmacopœial title. It becomes legal only when the content of water is honestly stated on the label. As for the content of camphor, Dr. Caspari had found that, whereas it should be 10 per cent, it often ran as low as $5\frac{1}{2}$ and 6 per cent, although in one case it was as high as 25 per cent. This was evidently another instance of somebody wanting "to get square with the Commissioner."

Altogether a total of 174 specimens of spirit of camphor were examined. In 93 cases the product was illegal. There were also examined 70 specimens of laudanum, and 49 of these were found below the pharmacopœial standard.

We are moved to point out one other condition of things disclosed in Dr. Caspari's talk. This was with reference to Seidlitz powders. On page 486 of the December BULLETIN we quoted Charles M. Ford, the well-known drug inspector for the State of Colorado, as finding that Seidlitz powders on the market were frequently much below weight. The same thing was touched on by Dr. Caspari, and it would seem that druggists all over the country need to be particularly careful about this product.

Dr. Caspari explained that 191 lots of Seidlitz powders had been examined. Of these 111 were illegal—either below weight or above weight. They had evidently been put up with a good deal of carelessness. According to the U. S. P., the blue paper should weigh $10\frac{1}{2}$ grammes, and the white paper $2\frac{1}{4}$ grammes. In many cases the actual weights had been found to run from 20 to 25 per cent, and in some instances even 50 per cent, below the standard. Occasionally the amount of tartaric acid ran as low as $1\frac{1}{2}$ grammes, while in other instances it ran up above weight to $3\frac{1}{2}$ grammes! It was found that the prices varied accordingly. They ran from 15 to 40 cents a box, and Dr. Caspari contended that if he were back in the drug business again he would weigh his Seidlitz powders accurately, put them up neatly, and charge 50 cents for them!

Summing it all up, it would seem from these and other disclosures that many druggists are careless about the preparation of their own galenicals, and equally careless about those which, if bought from others, are very easy of determination. They must brace up if they expect to avoid trouble. To adopt any policy of "trying to get square with the authorities" is certainly absurd and ridiculous. Most of the commissioners want to be lenient—and certainly Dr. Caspari is in this class. So far no prosecutions have been made in Maryland, and the work has been purely educational. Druggists have been told of the conditions in order that they could improve them—in order that they could get in out of the wet. When warned in this way they should profit by the information and put their house in order. For the lines will steadily be drawn tighter and tighter as the years roll on.

GIVE THE CANDIDATE AN EMULSION TO MAKE.

An interesting discussion arose at the last meeting of the Missouri Pharmaceutical Association on the importance of having practical dispensing work form a part of the examinations given by the State Board of Pharmacy. The question was brought up by Dr. Francis Hemm. He argued that two years ago, when the new pharmacy act was placed on the statute book, the drug trade had been led to believe that an era of higher standards had been ushered in. He had failed, however, to

witness any particular changes, and he was strongly of the opinion that the Board ought to begin stiffening its requirements. He pleaded particularly for the introduction of practical dispensing work.

The members of the Board, some of whom were present at the convention, were rather inclined to oppose the proposition. They argued that it would take some time to arrange for practical examinations; they thought that such changes should be approached with due solemnity and without haste and speed; and they declared that dispensing work could scarcely be done anyway when the Board was moving about from place to place, since it involved the use of considerable apparatus and material.

Several speakers, however, were warmly in favor of the Hemm motion. Dr. Whelpley asserted that over in Illinois practical examinations had been conducted for many years. Why, asked he, should a mere river divide two sections of the country with such different qualifications and requirements? He quoted the late Senator Sherman as declaring that "the way to resume specie payments was to resume." He thought the way to have practical examinations was to have them. As for the difficulty of giving practical work, Professor Hemm pointed out that the St. Louis College of Pharmacy would be glad to place its facilities at the disposal of the State board. He believed that the Kansas City College of Pharmacy would be willing to make the same offer, so that in these two cities at least the Board could hold meetings for the examination of candidates where the equipment for doing practical work was available with very little expense and inconvenience.

The sentiment was so generally in favor of practical examinations that a resolution was finally adopted in which it was recommended to the State Board that the work be instituted "as early as possible in the future." There is no doubt at all that this is the right step to take. For ourselves, we have argued over and over again that one of the very best methods of disclosing the shallowness of the average quiz-compend crammer is to set him actually at work over a dispensing problem. The benefits, however, are not merely negative—they are strongly positive. The best way to determine a candidate's general efficiency is to see how he handles himself under

those conditions which actually prevail when he is doing his life-work in the drug store. He should be surrounded with books and allowed to consult them; he should be given material and apparatus; and the atmosphere of the store should be duplicated so far as possible. He should be required to make emulsions and pills. He should be given prescriptions to compound. He should be given practical problems to solve. It will then appear pretty quickly whether he is a safe and skilful pharmacist or not.

The written and oral examinations should of course be continued. They are important. But they should by all means be supplemented by a practical examination. Fortunately this truth has been generally recognized, and to-day a considerable number of the boards of pharmacy are giving practical examinations of greater or less value. It is gratifying to know that the Missouri Board is going to get in line with this progressive movement.

OUR THREE PRIZE OFFERS.

We have had a number of contributions to the prize contests announced in the last BULLETIN, but we want a lot more. Here are the offers:

1. We shall pay \$5.00 at once for every accepted article on "My Best Paying Side Line," and we can use quite a number of them!

2. We shall pay \$10.00 for the best article, and \$5.00 for the second best article, on "My Experience in the Sale and Fitting of Trusses." Only the two papers winning prizes can be accepted on this subject.

3. We shall pay \$10.00 for the best, and \$5.00 each for the two next best, formulas for a hair tonic.

We want to get some rattling good material in all three classes—and we know our readers can give it to us if they will only set themselves at the task.

Let us hear from you!

What rent ought a druggist to pay—that is to say, what percentage of the total business is it proper for him to spend for this item of expense? This is an important subject, and we should be glad to receive the opinions of our readers. Please give us your views.

THE HALL OF FAME

THE NEW PRESIDENT OF THE CANADIAN PHARMACEUTICAL ASSOCIATION.

The Canadian Pharmaceutical Association is a body somewhat like the N. A. R. D. on this side of the line, although its field of work is more extensive on the one hand, while its delegate representation is smaller on the other.



C. E. NELSON.

The new president of the organization is C. E. Nelson of Vancouver, B. C. While Mr. Nelson has retired from active connection with the drug business, he is keenly interested in all movements looking toward the elevation and improvement of the calling. He has been a delegate at every meeting of the C. P. A. since its formation some years ago, and his election to the presidency at the Montreal meeting last year was a tribute to his zeal and ability. The next meeting will be held in Mr. Nelson's own town of Vancouver during August of the present year.

Born in England in 1861, and serving his apprenticeship in three different stores in Manchester, Mr. Nelson came to Winnipeg in 1882. During the Northwest rebellion of 1885 he acted as hospital aid and dispenser with the rank of staff sergeant. Outside of this ex-

perience he was variously occupied in different stores between 1882 and 1886. In December of the latter year he established himself in business in Vancouver, and in 1892 he formed the Nelson Drug Stores, Limited. In 1900 he became a member of the firm of Nelson, Macpherson & Sutherland, later bought out his two associates, and in 1909 disposed of his business to W. M. Harrison & Co.

During the last two years, since his retirement from active business, Mr. Nelson has been a member of the Board of Park Commissioners of Vancouver, and among other things has devoted considerable time to the perfection of plans for the improvement of Stanley Park, which is said to be one of the finest natural parks on the continent.

PROFESSOR DAY ELECTED PRESIDENT OF THE A. P. H. A.

The new officers of the American Pharmaceutical Association were announced last month. As usual, the election was carried on by mail, three sets of nominees having been submitted to the members. Professor Day won out for the presidency and will therefore assume the reins of power at the end of the Denver meeting in August, succeeding John G.



PROFESSOR DAY.

Godding of Boston, who is the president for 1911-12.

Professor Day has for many years been Secretary of the Faculty, and Professor of Histological Botany, of the School of Pharmacy of the University of Illinois. This winter Dean Goodman is away on a leave of absence, and Professor Day is acting in his

place both as executive head of the school and lecturer in materia medica. The Professor has always been very much interested in association work, and for a number of years has been secretary both of the Chicago branch of the A. Ph. A. and the Illinois State Pharmaceutical Association. As a faculty associate of the late C. S. N. Hallberg, he was in close touch with the latter's work and assumed temporary charge of the "Bulletin of the A. Ph. A." after Professor Hallberg's death.

PROFESSOR MOERK MADE ASSISTANT DEAN.

Frank X. Moerk is now assistant dean of the Philadelphia College of Pharmacy. Professor Remington became so occupied with the work of the U. S. P. Revision Committee, and with other duties as well, that it was necessary to relieve him of some of his executive responsibility at the college. We learn from the "Bulletin of the P. C. P." that the assistant



FRANK X. MOERK.

dean has already "made effective a number of innovations in the administrative work of the dean's office which promise to make for greater efficiency." Professor Moerk has long held the chair of Analytical Chemistry in the college, is thoroughly in touch with the needs both of the students and of the institution, and

is well qualified for his new position. The promotion of Professor Moerk, however, in nowise affects the courses presided over respectively by himself and Dean Remington.

A DRUGGIST AS COUNTY TREASURER.

Fred. T. MacDonald, a druggist of Kennett Square, Pa., was elected county treasurer last fall. Mr. MacDonald's candidacy was so popular that he won out by a majority of 4000,



FRED. T. MACDONALD.

even though there were three tickets in the field. For several years he had been a member of the borough council, and for more than fifteen years has been on the Republican County Committee.

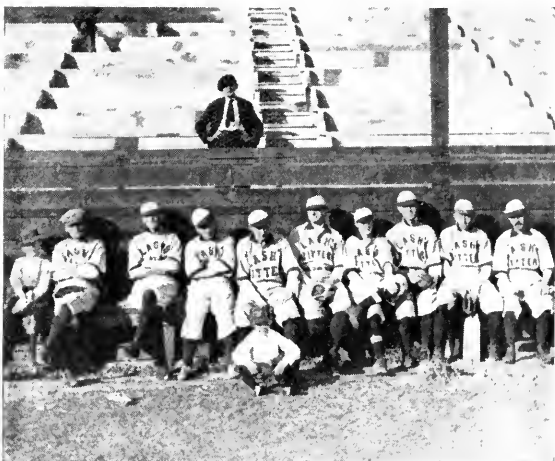
Several druggists in San Francisco have recently been prosecuted by the Farbenfabriken of Elberfeld Co. for the sale of aspirin not made by this concern. It should be understood by this time that aspirin is protected by both trade-mark and patents, and that under this or any other name it may not be legally sold at all unless it is the particular product of the owners of the patent. This of course applies to the sale of acetyl salicylic acid. The chemical itself is patented, as well as the process for manufacturing it, while the title "aspirin" is trade-marked.



The most remarkable advertising "stunt" ever "pulled off" by a drug firm was recently worked in San Francisco by the Owl Drug Co., owners of several stores. They employed aviator Masson, the famous French bird man, to make a flight over their stores in San Francisco and Oakland.



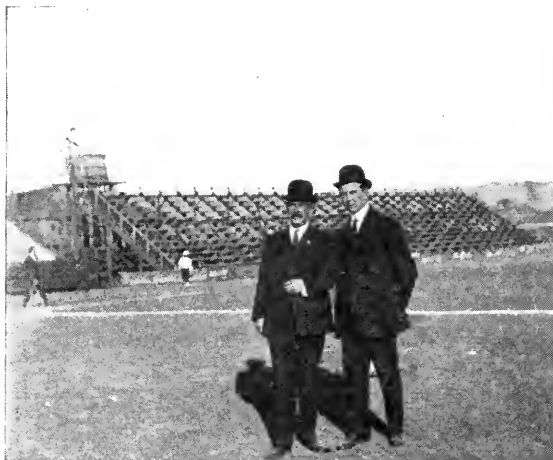
It was announced that the aeroplane man would drop a package for the Oakland manager of the Company from about 4000 feet up in the air, but in the meantime he circled around both cities and flew about 30 miles. In our picture the crowds are shown watching for the package to be dropped.



It is perpetual summer out in California, and so these pictures indicating a ball game between the druggists of San Francisco on the one hand, and those of Oakland on the other, need cause no surprise in the middle of winter.



This is a picture of the winning team—the San Franciscans, with J. D. Elliott as manager, and "Jim" Lidley as captain. The Oakland team across the column was managed by H. B. Meader and captained by R. J. Cracker.



Here we have the two managers of the opposing baseball teams—H. B. Meader on the left and J. D. Elliott on the right. Carson Angel, a well-known Parke, Davis & Co. man on the coast, acted very successfully as umpire.



We fill out this interesting page with a picture of the new soda fountain installed in the drug store of Neuendorf & Schmick of Saginaw, Mich. The fountain is a Walrus, and was of course furnished by the Walrus Manufacturing Co. of Decatur, Ill.



Windmueller & Elich, proprietors of the Northwestern Pharmacy in Chicago, at the corner of Milwaukee Avenue and Robey Street, recently conducted their tenth anniversary celebration. Note the conspicuous white columns on the street, from which were strung festoons of evergreen to the building itself.



Here we have the same view of the outside of the store taken at night. The effect is most brilliant. Something like 1000 electric bulbs were strung along the evergreen and attached also to the white column. The store stood out conspicuously for blocks away.



This shows the interior of Windmueller & Elich's establishment, elaborately and handsomely decorated and trimmed for the anniversary celebration. The display both inside and outside was kept up for a month, and it proved to be a great success.



The Artz Drug Co., Red Oak, Iowa, has a remarkable store for a town of that size. The fixtures cost about \$6000, and there is a stock of \$15,000. The owners and officers of the business are D. Artz, D. W. Casey, and C. B. Artz.



Charles H. Jackson is proprietor of the Celina Drug Store in Celina, Texas. Mr. Jackson is presumably the gentleman standing by the door.



This is an interior view of Mr. Jackson's store. The establishment presents a neat and clean appearance and is a very representative store for a small town.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

(Continued from January BULLETIN.)

CHAPTER II.

STARTING THE BALL ROLLING.

During the years that I had been working in the store as a clerk, I had been pushing a little all the time on this business ball. For the first year or two after I owned the place, I pushed a little harder, but thus far the ball had not started any. It seemed as if it was uphill in every direction. Subsequent reflection leads me to believe that the trouble was not so much the grade as it was the lack of a hard enough push.

The newspaper advertising that I had been doing was of the smallest sort; three inches, single column, once a week in two weekly local papers.

I decided to develop this kind of advertising farther, and I wrote advertisements for larger space and adopted a uniform style of arrangement for all of them. This was a single line head in plain, black letters, capitals and small letters instead of the all capitals often used in headings by inexperienced ad. writers. I used always the name "Farrington's Drug Store," and under this I wrote "Book Store Too," and under this "Your money back if you want it." The last was in italics.

The enlarged space made the advertisements large enough to attract more attention and the "Book Store Too" and "Money back" sentiments seemed to catch the popular fancy. Before very long my store became known as the Money Back Drug Store. I cheerfully put up with all the joking about it because of the value of the publicity.

About this time too I began to want to get to the people direct by mail with other advertising matter. A mailing list was obtained by writing down the names of the people on the

different streets. This I did from memory. A better way of getting a list was to send a man or a boy around the town to take down the names of the families in every house. Where he did not know the occupants he could ask their names.

A FOLDER ON BRUSHES.

One of the first pieces of advertising that I mailed out was a four-page folder about brushes. It was 3½ by 6 inches in size. On the top of the first page was the caption "Brush Talk;" at the bottom my signature "Farrington's Drug Store, Delhi."

The third page contained a full-page half-tone of one of the most attractive local scenes. As this was before the day of post-cards, the folder was valued for the picture. Opposite this, on page two, was the following copy:

ABOUT HAIR BRUSHES.

If hair brushes could talk, they would first of all say, "Keep us dry." If you cannot keep your hair brushes dry, keep them as dry as you can. They will last twice as long dry as they will wet.

Probably the brush most easily kept dry and clean is one with a solid wood back, or a so-called aluminum back.

Ordinarily, the more you pay for your brush the better it will be, and what is more, the cheaper it will be, too. The quality advances more rapidly than the price.

ABOUT PRICES.

The best way to get prices is to see the brushes and ask how much they are.

We cannot describe them well enough here. We have a solid back, ebony finish brush for 25c. It is a cheap brush but a good one for the price, best we ever had in fact. We have none cheaper. The prices are 25c, 30c, 35c, 38c, 45c, 50c, 55c, etc., up to \$1.25.

The military brushes are \$1.25 a pair, of

first-class quality, with ebony or light-colored backs. The aluminum-backed brushes sell for 50 cents and upward.

(Money back if you want it)

On the fourth page the following copy was used:

TOOTH BRUSH FACTS.

Tooth brushes are meant to be wet. You cannot wet them too much or too often. Water will not affect their backs or make their bristles come out. Use will bring the bristles out if they are not well put in.

Do not think that all the bristles that come from your tooth brush come out. Some break off. In a good brush they should do neither.

If you buy a cheap brush you may be certain that the bristles will pull out. A cheap tooth brush is no economy. By cheap we mean less than 25 cents. The bristles in a poor brush may get into your throat and cause trouble.

We make more money selling cheap brushes, but we prefer to sell good ones. We want satisfied customers.

Our 25-cent brush is a four-row, all-French-bristle brush. We guarantee the bristles not to come out.

We have better brushes, better and cheaper because they last so much longer, at 30, 35, 40, 45, and 50 cents.

For ten cents we will sell the best brush ever sold in town at that price.

(Money back if you want it)

It may seem that my ideas of hair brushes were not very high in point of prices, and they were not at that time; \$1.25 looked like a good price for a hair brush, and it was seldom we sold one for more than 50 cents. It took time to get away from the cheap idea, and it took

time to get the public away from it. But the sale of a dollar hair brush looked bigger then than the sale of a three-dollar one now. Of course I am speaking of plain wood-backed brushes, not fancy ones.

There are in nearly every town people that will buy the best if they can get it. In many instances they are sending away for high-class goods while the local druggist erroneously supposes there is no demand for them.

By adding better goods judiciously and advertising them to the class of people who can afford to buy them, the quality of business in any drug store can be elevated indefinitely.

Another use that I made of the half-tone plate, which had been made for me for use in the above folder, was as follows:

I had a supply of cards printed, 5½ by 7 inches, with the half-tone at the bottom. Under the caption to the picture I added "This is an advertisement of Farrington's Drug Store." At the top a hole was punched so that the card could be hung up. The heading said, "For the Housekeeper to Read."

Under this were four paragraphs of reading matter. Here they are:

Our BORAX Book would help you. Borax has a thousand uses—more, too, probably. It's good in the kitchen, good for medicine, for the bath, toilet, complexion, hair.

Book free telling all about it.

20 cents a pound, 5 cents a quarter.

* * *

CREAM OF TARTAR needs to be bought with care. Impure foodstuffs are bad foodstuffs. There is nothing in our cream tartar but what belongs there. The price is the best possible for the best goods.

50 cents a pound, 15 cents a quarter.

THE SAFE TOOTH BRUSH

The only safe tooth brush to use is the guaranteed brush. There is no economy in a cheap one. The cheap brush will shed its bristles and soon become worthless. Our guaranteed brushes occasionally are imperfect but we will replace any imperfect one with a new one free of cost. The good ones last until they wear out. The cheap ones only until they fall out. If you are a singer, don't run the risk of throat trouble from a loose bristle stuck in your throat. Any brush with "Farrington's Drug Store" stamped on it, is all right. We guarantee all brushes bought of us, costing from 25c each up. The cheaper grades we do not warrant. We give you the best value we can for the money and can do no more. Remember that the more you pay for a brush the cheaper it will be in the end.

FARRINGTON'S, . . . DELHI

WE'LL SAVE YOUR HAIR.

We keep everything the hair needs. Brushes are the most important. The prices are from 25 cts. up. Brushes for babies' heads; for bald heads, for all sorts of heads. 50 cts. buys a splendid brush, more money buys a better one. Every brush is guaranteed. We have a quinine hair tonic at 25 c. It is our own and it is warranted to keep your hair in. Try it thoroughly. It makes the hair clean and glossy. You need combs as well as brushes. Comb prices begin at 5c. We sell the rubber combs, fine combs, course combs, barber combs, horn combs, metal back combs; any sort of combs you wish. Use tar soap for shampooing your hair, 20c and 25c. It pays to care for the hair.

Farrington's Drug Store.
Book Store too.
Money back if you want it.

The best disinfectant made is Chloride of Lime. It is clean and easy to use.

This is the season when an ounce of disinfectant is worth a pound of fever medicine.

In Zinc Cans

It comes and we sell half pounds for 10c, pounds for 15c. All the other disinfectants are valuable. Sometimes one of them is better than lime.

Copperas 5c a pound.

Farrington's Drug Store.
Book Store too.
Money back if you want it.

Do you make or use washing fluid? We put up the old ammonia and potash receipt every day.

The best to use is "Champion" It is as strong as Babbitts and costs less. Champloo 10c. Babbitt's 13c.

It's a Cleaner

and used alone is good to cleanse sinks and drain pipes.

We guarantee the Champion.

School books are expensive. We sell them as low as we can and live—you'll admit our right to live—but the publishers want to make too much money.

We'll take your second-hand books and if they're in good condition allow you half price. There's money in that for you. Old school books are soon out of date.

If it is a special

School Book

that you want we will order it for you. We want your school book trade and will use you well.

Farrington's Drug Store.
Book Store too.

Money back if you want it.

About tablets for school use—that's where we shine. We have the biggest and best

5c Pad

on the market. Our stock of last year's five cent pads is too large. We're going to close them out

For 4c

You've never seen as good tablets as these new ones are

Paper is cheap now and the result is good tablets for little money.

Every one knows the value of ROCHELLE SALTS. Don't be without some in the house. It will save many headaches and doctor's bills. It is the simplest of home remedies. No danger in using it. Be sure you get the best. We buy in original packages and we know it's pure. The price is

40 cents a pound, 10 cents a quarter.

* * *

BAKING SODA. That's a common enough article. It's common enough, too, for it to be adulterated with sal soda. Do you buy from a dealer who can tell whether his baking soda is or is not adulterated? Ours is pure.

10 cents a pound, that's the price.

These cards were handed out flat, and it was intended that they should be hung up in the kitchen. I thought the picture would produce

Big Paper Display

Next week we are going to make a display that will show up all the varieties of our big box paper stock.

We have just received a second large shipment of the Hurlbut papers. We shall display them in our windows and inside the store with the prices in plain figures.

You will have a chance to see all that is new and desirable in that kind of goods.

This extra display is more with the idea of showing people what is best in the stationery line than of selling goods at this time in particular.

We want everybody to know what a splendid lot of paper we have and we want them to come and see the stock.

There is no line that can equal the Hurlbut line and we are proud of our selections from it.

FARRINGTON'S, - DELHI.

Our Rubber Line

comprises the best values at the price in every instance.

In hot water bags, 79c buys a splendid guaranteed 2 quart article.

\$1.10 buys one that none can beat.

Fountain syringes prices begin at 85c. For \$1.50 we'll sell one that will last for years.

The cheaper ones are bargains though. Bulb syringes are 50c, 75c, \$1.00, etc. Every one warranted perfect.

Atomizers—50c, 75c and \$1.00. The 75c one sells best and wears long enough.

If you want a good, durable bath sponge, get a rubber sponge.

Prices, 75c and \$1.00.

*Farrington's Drug Store
Book Store too.
Money back if you want it*

Two more of the early newspaper ads.

that result. How many of them were kept and hung up I do not know, but I do know that the sales on the goods mentioned increased.

MAKING THE MOST OF THE WINDOWS.

Along with all of my advertising I used the windows, such as they were, and made displays in them of the goods advertised. At first I started in to change and wash the windows every two weeks. But even before I began to have glimmerings of intelligence, I saw that they must be changed every week whether they were washed or not. In the end it resolved itself into washing and dressing each window once a week with occasional exceptions.

I believe that this use of the windows has done as much as any one thing outside of the newspaper advertising to develop the business.

My store was on the wrong side of the street. My hottest competitor was located nearly opposite with the best location in town. Most of the travel, too, was on his side, but he made poor use of his windows. Usually they

were dressed with patent medicine dummies or something equally unattractive, and people noticed the difference between the trims of the two stores.

The ball was beginning to roll. People were coming in who had never come in before. They were beginning to find that I had the goods and that I sold them right. The advertising brought them in and the service held them. I made no play for personal popularity. I joined no lodges and did not work my church connections for business purposes. Many of my best customers in the end were people who did not like me personally, or people whom one might naturally think the other stores would have held for personal reasons.

The success of the store was a direct tribute to good advertising and proper store methods. The public cares more for getting its money's worth than for patronizing its friends and acquaintances or the members of its own lodge or church.

I do not say that it is not proper for a man to take advantage of such connections to advance his business, but I do say that that is not what they are intended for and it is not necessary. A man who joins any fraternal or religious organization for the money there is in it ought to be kicked out forthwith.

ONE UNPROFITABLE SCHEME.

Among the advertising plans tried and found wanting was the supplying of pay envelopes to a manufacturing plant. I supplied the envelopes free with an advertisement imprinted on them for a dentifrice, but I was never able to trace any results to this.

Of course there is no end of advertising that pays but produces no directly traceable results.

But I am pretty well convinced that advertising on pay envelopes is practically a waste of money.

Another form of advertising that is commonly conceded to be practically valueless is that on theatrical and fair programmes such as the village merchant is often besought to buy. However, I always made it a rule to take some space in every such thing that came along because it secured the good-will of the promoters. And if only a small space were taken, it did not cost much. A druggist can ill afford to offend a group of individuals or an organization in order to save the price of a small advertisement in a programme.

And one might just as well refuse to help

the programme committee along as to take the space and make a great fuss about having to do it and send away the promoter disgruntled. Whatever you do, do it cheerfully and get all the credit you can out of it.

GOING AFTER THE SCHOOL TRADE.

Practically every village drug store and most others carry a line of stationery, and I found it profitable to go after the school trade along that line. One of the little schemes I tried was the following:

I had a supply of $3\frac{1}{4}$ by $6\frac{1}{4}$ cards printed like this:

HERE'S A PENNY!

Give it to the one of the family who starts for school first. It will buy a penny pencil at our store.

You might bear in mind, too, that we sell all sorts of school supplies.

We sell new and

SECOND-HAND

school-books at proper prices.

We want to get second-hand books in good condition. We'll take yours in exchange if they are books we can sell. Bring them in anyway. No harm done even if we can't use them.

FARRINGTON'S DRUG STORE.

I attached a new, bright penny to each of the cards and mailed them to the woman of the house wherever there was a child of school age. The list of "parents or guardians" was easily secured from the secretary of the board of education.

Most of the pennies came back, and many others with them. The plan was a great success at getting the children coming to the store. The values we gave them kept them coming. Children know very well when they are getting their money's worth, and they are always ready to tell the rest about the store that gives the most for the price.

A folder, 6 by $3\frac{1}{2}$ inches, that brought me some good business about this time was one that I called a "Rough Weather" folder. The display lines were all printed in what is known to printers as "Powell," or "Cheltenham Bold," these being very similar. There were no capitals used except in the body of the text. This omission of capitals gave the job a rather unique appearance and probably attracted a little attention to it. Here is page 1:

some
rough weather
things

farrington's drug store
delhi

Page 2 was a follows:

what they are

The late fall months add many discomforts to life. We can relieve you of most of them.

We have all the best cold cures. If we brag a little here, remember that we are talking about our own preparations mainly. They are made from our formulas and we know what is in them.

white pine and tar

That is a cough medicine that really stops a cough. If it fails, you get your money back.

Nothing harmful in it. Pleasant to take; the children like it. We have sold it for years, more every year.

It doesn't cost much; 20c, 2 for 35c. Cheaper to buy than any of the patent cough cures. Better to use.

Page 3:

cold cream

Pure, clean and fragrant with the odor of the best imported rose-water. Nothing better than this for chapped lips and rough-weather complexions.

It nourishes the skin. Apply it at night, and in the morning sun-burn and wind-burn have disappeared.

You will find Parke, Davis & Co.'s name on this, and that means that there can be none better at any price. Big jars, very attractive, 25c.

velvet cream

It isn't sticky.

You can use it on your hands and draw on a glove almost immediately after. It is a liquid and more easily absorbed than a solid cream.

Fine for all chafed surfaces. 22c a bottle.

quinine pills

Heard of them before, have you? Well, we won't bore you long about them this time?

What have you been paying for them? We sell the best (P. D. & Co.'s) for 5c a dozen, 35c a hundred.

stop dentists' bills

Here is a dentifrice that makes the teeth clean. No harm in using this. It's delightful in taste and effective in cleansing.

In tubes, easy to use, easy to carry, 25c.

The name? Euthymol Tooth Paste.

Page 4:

"Don't shoot," says Si, "it ain't no use.

It's Deacon Peleg's tame wild goose."

Says Ezra, "I don't care a cent,

I've sighted and I'll let her went."

Have you "sighted" some other drug store for

your "rough-weather stuff," or do our arguments appeal to you? If you are ag'in' us after reading this little folder, we shall be sorry but not discouraged.

one last word

Don't forget that we give you back your money if you want it. We say we'll do it and we will.

We want no dissatisfied customers.

farrington's drug store
delhi, n. y.

This folder was mailed to my increasing mail list, which now numbered some 600 families in Delhi and the surrounding farming country.

We often had calls for the goods advertised in our folders, the customers mentioning the folder, but a careful record of such calls never showed enough direct returns to pay for the advertising. Still the business kept increasing, and after all that is the true test of the successful advertising. If the business keeps growing the advertising must be paying.

I kept on the counter at all times plenty of neatly printed little slips for insertion into parcels. Here is the style of one of them that helped build up the demand for a headache remedy:

THE MAN

With The Head,

or the woman with the head, either is likely to have aches in that head.

Headaches are of frequent occurrence in every family. They happen in your family.

They don't often help the domestic machinery to run more smoothly. They are not as a rule productive of much happiness.

It is a good plan to have something in the house to stop the headache before it runs away with the head.

Make it a rule to have Farrington's Headache Tablets in such cases. They are but 10 cents a package and are guaranteed to stop any and all headaches and neuralgic pains.

If they don't cure, your money back and no questions asked. There is no other "just as good."

FARRINGTON'S DRUG STORE.

Book Store Too.

(Money back if you want it.)

This matter was printed across (the short way) a strip about 10 inches long, and so folded that before opening it showed only the heading, "The Man." Unfolded once, the next line showed, and finally the whole. The strip was $2\frac{1}{2}$ inches wide.

My annual sales were crawling up—\$4823; \$5530; \$6249; \$6743. On the basis of the last figure my store expenses, including my own salary, which I figured at what it cost me to live that year (\$657), were \$1718. I bought goods to the amount of \$4073. My inventory remained practically the same.

(To be continued in March.)

A MODERN STORE OPENING.

Conducted by Newell Brothers of Warren, Pa.—Over 4000 People Visited Their Beautiful Pharmacy—A Description of the Event and the Place Itself.

Newell Brothers of Warren, Pa., recently had their pharmacy remodeled. Desiring to call attention to the improvements that had been made, on November 16 they held a store opening. The event proved such a success that we feel our readers will be interested in the details. They show how a modern, effective opening should be conducted.

The Newell store impresses one with its richness and elegance, but unfortunately the engraving fails to show adequately the beauty of the interior, the fixtures being designed and supplied by Bangs. It would be a difficult task to describe in cold type the appearance of the establishment. Newell Brothers are said to

have one of the handsomest pharmacies in their part of the State. At the opening the beauty of the place was enhanced by floral decorations of roses, carnations, chrysanthemums and other blooms with smilax artistically arranged and potted plants filling in between.

On the day of the opening Newell Brothers remained open until 11 o'clock at night. The event had been well advertised and 4000 people called. Souvenirs were given to all. The women received Whitman's candy, soda-water tickets, and perfumes, while a choice cigar, Euthymol tooth-paste, shaving soap, and soda-water tickets were presented to the men. To

describe more fully the inducements held out to visitors, a thousand souvenir boxes of

cigar from the regular stock. To the children and grown-up folks as well, who attended the celebration, were given free tickets, each one good for a glass of soda water any time after the opening. The last offer, however, was restricted to children accompanied by an adult.

To make the evening hours joyful for the visitors, Newell Brothers arranged a special programme of popular and classical music.

A few special gifts were distributed to honor the big reception. The newly equipped store had been photographed at its best and a large number of prints ordered. One of these was given to every adult who visited the opening.

After two o'clock in the afternoon of the gala day, the first hundred women callers received a full 25-cent jar of Pura Cold Cream. All of these offers were of course announced in the folder distributed by Newell Brothers before the opening.

THE INTERIOR OF THE STORE.

The Newell Pharmacy has several notable features. The store fixtures proper consist of ten buffet wall cases, made of solid mahogany, with mirror backs and gold trimmings. The shelves are of plate glass, three-fourths inch thick on adjustable nickel brackets. The case doors are also of plate glass, sliding on roller bearings. There is a six-inch base of green Italian marble extending all around the room.

The soda fountain, always handsome, was especially beautiful with its floral decorations

Come and Celebrate With Us

The Grand Formal OPENING

of the Handsomest
Drug Store in the State

Newells' Pharmacy

Those who remember having read in the papers some few months ago of our contemplated big improvements, can satisfy themselves that these improvements were to be made for their benefit.

'Tis true that it has taken some little time for making this drug store the handsomest in the State, but we have given ourselves plenty of time to equip our store with everything new and make it come up to this standard.

That's the reason for the Grand Formal Opening—and a good time for everybody.

Thursday, November 16th

This will be the day of all days for the people of Warren. Such grand and glorious preparations have never before been made as those we have planned for this day. Therefore, we want you to be sure and give us a visit.

FREE—Dainty Souvenirs—Candy for the Ladies
—Cigars for the Men—something good
for the little ones—and Gifts of all kinds.

So be sure to come and get your share of these Free Things. Something for every member of the family.

SEE INSIDE

A house-to-house distribution of this four-page folder was made a day or two before the opening. We show only the front page here.

Whitman's candies were presented to the women who called. Each man who came to the opening received a ten-cent La Preferencia



The \$12,000 pharmacy of Newell Brothers in Warren, Pa. The fixtures were designed and supplied by Bangs.

and art-glass lights. It was made by Bangs of Boston. The fixtures of this fountain are of glass and German silver. All pipes and coolers are made of pure block tin. The syrup jars are of solid porcelain, and the pumps are solid silver.

The counter of the fountain is made of selected Mexican onyx, inlaid with pieces of other onyx in various colors. The back bar and refrigerator are of marble and German silver. Surmounting the back bar are three large mirrors, and above is a heavy cornice of solid, hand-carved mahogany, with art-glass lights and lanterns. The top part is supported

by four heavy onyx columns, five feet high, tapering from six inches in circumference at base to three inches at the top. A beautiful art-glass dome surmounts the fountain and is a suitable finish. The rail in front is also of Mexican onyx, and the latest ideas are shown in the electric mixers and carbonators.

The soda tables were made by the C. H. Bangs Co., of Boston. They have thick beveled glass tops trimmed with solid mahogany.

When the reader is informed that the total cost of this store's furnishings and soda fountain and signs was about \$12,000, a fair idea is given of the place.

FLEXIBLE MIRRORS FOR SHOW WINDOWS.

Preferable to Glass in Some Respects—Can Be Handled or Bent Without Breaking—The Silvering Process with Full Directions that Any Druggist Can Follow.

By H. C. BRADFORD,
Nashville, Tenn.

It would seem that a flexible looking-glass is an impossibility, but it is not. The production of a mirror that may be bent into any desired shape or position is quite possible, nor is the process either difficult or costly.

These mirrors will prove to be of the greatest possible use in preparing backgrounds for show windows, and in other ways. The advantages of a mirror back are well known, but with the ordinary form the disadvantages are so many and so great that they are used but seldom. With this variety, however, all is changed. The mirrors can be put in and taken out as desired. They can be cut or bent into any size or shape, and as they weigh but a small fraction of what the glass ones do, they can be used in many positions and places where the latter would be impossible.

HOW THEY ARE MADE.

To produce these mirrors, the following materials are required: Some egg-white, the highest grade varnish, perfectly transparent, as nearly water-white as possible, and flexible or elastic. One of the high-grade floor varnishes is excellent for this purpose. A sheet of tin-foil, some mercury to form the amalgam, and lastly some paper are required. A good quality of cement is also needed.

Having obtained these, we proceed as fol-

lows: Take a sheet of good, strong, well-sized paper, of about the size of the finished mirror, and apply three to four coats of the egg-white, giving each coat time to get thoroughly dry before the next is put on. Use a soft brush in doing this, and make it as smooth and even as possible. When this has thoroughly dried, apply the varnish, on top of the egg, spreading it smoothly and evenly, and giving each coat time to dry thoroughly before the next is put on. It is best applied by flowing rather than brushing, as this makes it smoother. Continue to put on coats of varnish until it forms a body about as thick as a piece of ordinary glass.

Now take a sheet of pure tin-foil (and be sure it is made of tin too, as lead will not do so well), and smooth it out on a flat level surface until it is perfectly smooth and free from every vestige of a wrinkle. Then apply about four coats of varnish, in the same manner as previously described. When the last coat is dry, glue it with good strong glue to the paper that is to form the permanent back of the mirror. Some care is needed in selecting this paper, as it is necessary that it be flexible; but it should also be tough and capable of standing usage, otherwise the mirror will soon wear out. The best material for this purpose is "tag" paper. This is made

from so-called rope stock, which is nothing more than old rope and twine, and is very strong, tough, and durable. It is the material used for the back of the small advertising memorandum books. It comes in a variety of colors—red, green, blue, etc.

When the glue has dried, and the varnished foil and the paper back are by that means strongly united, turn the sheet over on a smooth level table and apply enough mercury to the other side of the foil to make a smooth amalgam. This will not require much. Apply the mercury a few globules at a time, and rub and spread it out with a small piece of chamois leather, rolled up into the shape of a ball, taking care that it is free from wrinkles on the outside. The mercury is best applied by rubbing lightly and gently with circular strokes, going over the entire surface smoothly and evenly.

PREPARING THE CEMENT.

With the amalgam completed, it is time to set up the mirror. For this we shall need some good strong cement that is perfectly transparent to unite the various parts. For this purpose there is nothing better than a saturated solution in distilled water of the very best quality of acacia in tears. Select those tears which are clear and transparent and with no signs of color. Dissolve them in the water and strain the latter through a piece of wetted muslin. It is a good plan to use a large excess of water, filter the solution through a flannel filter, and then concentrate on a water-bath. This will insure a perfectly colorless cement. If it is not desired to do this, gelatin can be employed, dissolving it in the usual manner. But the acacia is preferable, as it gives the strongest cement. With the latter on hand, take a soft brush and apply a very thin coat to the varnished side of the first paper, take it up carefully and lay it on the amalgam side of the foil, then with a roller such as is used in mounting photos, or some such instrument, roll it down until it sticks smoothly and evenly at all points, with no air bubbles or other defects. This done, it must be weighted down heavily and left for thirty-six or forty-eight hours until the cement and glue get well set and thoroughly dried. Pressure also insures a good contact between the varnish and amalgam; and since it is on this that the clearness of the mirror depends, the

heavier the weighting is, the better will be the results attained.

A good plan after the varnish is applied to the amalgam is to lay a smooth sheet of paper over all, and on top of this apply a frame made by nailing smooth boards to a couple of pieces of 2 x 4 inch timbers, taking care that the board side, which goes next the mirror, is perfectly smooth and free from all nails, etc. The timbers will make it stiff and strong, and any sort of weight may be piled on top of it, with the certainty that the pressure will be alike at all points. Were the timbers omitted, or replaced with thin boards, the latter would likely spring or give under the weights, thus making the pressure unequal, and marring the beauty of the work.

THE FINISHING TOUCHES.

At the end of the time remove the weights, take out the mirror and lay it down flat. With a large brush or sponge, moisten the upper paper. It will be remembered that this paper was glued on with white of eggs; the moisture will soon loosen it up, when it can be peeled off, and reveal the mirror, all ready for use. If the work is carefully done, it will give results that will be surprising. Beautiful results may be also obtained by coloring the varnish slightly with various aniline colors, taking care however that the transparency is not lessened.

To read this article it may seem that a lot of work and time is required, but in reality this is not the case. It requires some time to complete the job, but the actual time employed in the work on it is comparatively little, since the drying and other such matters will go on without any attention whatever.

I have spoken of these mirrors as an adjunct of the show window, but they should also prove to be salable at good prices for many different purposes. In fact, they are of value in many ways not mentioned here at all, but which will suggest themselves to the progressive dealer.

In conclusion, remember that all things require some experience to get the best results, and this is no exception. Don't throw the matter aside because your first attempt is a failure. The material used costs but little, so the damage is not great. Try it over. Success comes only from effort, and the results in this case will well repay a considerable expenditure of time and money.

A LIVE ORGANIZATION OF CLERKS.

What the California Drug Clerks' Association Has Accomplished in Ten Years—The Record of Achievements is Quite Surprising in Nature and Extent—A Brief History of the Society, and the Men Connected with It.*

Inspired by a desire for closer relationship with their fellow clerks, and imbued with the hope that much benefit would result from better acquaintance and fraternal association, some of the moving spirits among the drug clerks of San Francisco conferred, and in April, 1901, sent out a call for a meeting of drug clerks to form an organization of the members of their craft. This meeting convened in Pythian Hall, and was called to order by Mr. W. H. Adair, who presided until permanent officers were elected. Much enthusiasm was manifested, and the conference resulted in the formation of what was for some years known as the San Francisco Drug Clerks' Association and the election of Mr. N. P. Wynne as its first president.

Gaining by the experience of other bodies which had been organized on social and literary lines, the drug clerks determined to make their association of such benefit to its members as would insure its permanency. That its founders reasoned well is evidenced by the history of the association. While others of similar character in various parts of the country have come and gone, this association, after a record of ten years, is stronger to-day than at any previous time in its history, and is, we believe, the only association of its kind in the United States that has been permanent. We have our own hall and offices as permanent headquarters, have a salaried secretary who devotes his entire time to the interests of the association, and our treasury is in excellent condition, with no outstanding obligations.

SOME EARLY HISTORY.

The first charter issued to the association by the Retail Clerks' International Protective Association adorned the walls of our club rooms located early in our history at No. 31 Second Street, where, owing to the long and late hours then prevailing in the business in which we are engaged, many largely attended and enthusiastic meetings convened at 10 P.M., and adjourned in the "wee small hours of the morning."

*Reprinted from the *Drug Clerks' Journal*.

Shortly before the catastrophe which visited San Francisco in 1906, we moved to more commodious headquarters in Pioneer Hall on Fourth Street, where many of the valued archives of the organization were destroyed in the great conflagration of that year. Among these records was our first charter. However, upon the reissue of that document most of the original signatures were procured, and we find the following names on the charter under which we are working to-day: E. J. Molony, C. B. Whilden, A. D. Fretz, Phil. Weiss, F. A. Driscoll, J. H. Hubachek, F. H. Gray, Will E. Murphy, Fred. Graham, W. H. Adair, N. P. Wynne, P. A. Dubois, A. H. Hoag, A. E. O'Neill, George Gerard, W. H. Saey, J. A. Besby, and A. H. Mehrtens.

The following members have served the organization in the capacity of President, in the order named: N. P. Wynne, Paul Dubois, E. J. Molony, C. B. Whilden, A. D. Fretz, Prof. J. H. Flint, and at present J. S. O'Callaghan. Two of these gentlemen are no longer residents of San Francisco, but the other five are still actively interested in the work of the association, and have been largely instrumental in making it the success it is to-day.

The association flourished from the beginning, and as its benefits increased and the advantage of standing together was manifested, its membership grew until the hospitable hand of fraternalism was extended to our neighboring cities. So ready was the response in this direction, that the advisability of making it a State-wide organization was considered and decided upon, and in 1907 we received authority from the International granting us jurisdiction over the entire State of California, and giving us the right to change the name of the organization to that of the California Drug Clerks' Association, which is now the official designation, and which has enabled us to number among our members, drug clerks throughout the length and breadth of the "Golden State."

MORAL TONE.

While our association welcomes additions to our ranks, under no circumstances will we re-

ceive into our membership persons who are not of the highest integrity, and more than one application for membership has been denied because the applicant could not satisfy the membership committee in this regard. Should a member be found derelict in morality, either by reason of excessive intemperance or narcotic habits, dishonesty or other cause, his resignation is requested or he is expelled. We desire membership in the organization to be synonymous with "character" in its highest sense. We stand for the proper deportment of our members and for the enforcement of the laws pertaining to our profession. We are strong advocates particularly of the laws relative to the dispensing of narcotic drugs, and the officials entrusted with the enforcement of these acts will receive our unqualified assistance and moral support, either by our influence in passing proper legislation, or in the execution of the statutes.

SOCIAL FEATURES.

Our organization has not been derelict in developing the social side. Our dances and picnics, our moonlight excursions and trolley rides have all been features of special enjoyment, and one of the crowning events has been our annual "open house" on New Year's Day, when with music and refreshments, decorations and entertainment, our headquarters have been thrown open to our friends that they might participate in our enjoyment on this particularly festive occasion. Nor are the sick or infirm forgotten on this gala day, for a committee is always sent to them with good cheer and words of sympathy and encouragement to brighten their weary moments.

PROPRIETORS.

One of the pleasantest features of our history, and one of which we are particularly proud, is our very harmonious relations with the proprietors. On many subjects we have sought their advice, and upon all occasions their coöperation, which has been generously extended to us in each instance, and we are delighted to feel that our relations with them are so cordial. They have always been invited, and have participated in our social events; our body has been addressed by them on subjects of scientific and commercial interest, and in conference with them on business topics we have always found them ready to assist us in attaining the objects which we

sought. They have been granted, and have accepted the use of our headquarters on occasion, and the privilege of extending them such courtesies will always be our pleasure.

HELPING EMPLOYERS.

If in any manner it lies within the power of this organization to help our employers to increase the values received for the commodities they handle, we wish to assure them of our desire to heartily coöperate, for we realize that their interest is our interest, and as the clerk of to-day may be the proprietor of to-morrow, this is a further incentive to us to improve the conditions pertaining to the business side of our calling.

BOARD OF PHARMACY.

It is a matter of great pride that three governors of this State, viz.: Governors Gage, Pardee and Gillett, have honored the association, and shown their confidence in us, by appointing to membership on the California State Board of Pharmacy, clerks who were active members of our association, and that at the present time three members of this important commission are of our number. Brother Molony has been a member of the board since 1903, and Brothers Whilden and Sutherland have been connected with the board for the past six years. All of them have been as active in protecting the health and interests of the people of the State of California as they have been in promoting the welfare of the drug clerks. They have rendered a splendid account of their stewardship, and we are proud of them.

BENEFITS.

But let us see what the California Drug Clerks' Association has done that has been of real tangible benefit to its members, and first we will mention our

SICK AND DEATH BENEFITS.

A standing committee known as the "Sick Committee" is always ready to respond to the call of those in ill health; not only to visit them frequently and report their condition to the association, but also to see that their necessary wants are attended to, and to make provision for the payment of the sick benefit, which is five dollars a week for a period of twelve weeks, and in several instances aid has been continued for a much longer period.

Should the grim reaper visit one of our

members, his widow or family are visited, all aid possible extended, and if he has been a member in good standing for six months, his family receives a check for \$25, and this is graduated according to the length of his membership to a sum reaching \$200; the majority of the present membership is now entitled to this benefit in case of death. Should a member be without family and pass away, the last sacred rites are attended to by the association.

EMPLOYMENT BUREAU.

This feature has resulted in great benefit to our members, and to employers as well. It had its inception early in the history of the association, its object being to aid our members out of employment in procuring positions and to aid the employer in finding reliable help. This is done without expense to either party, is mutually advantageous, and is still one of the features of our organization which is much appreciated. But never were its benefits more strongly manifested than after the catastrophe of 1906. Owing to the destruction of so many drug stores at that time, the number of clerks thrown out of employment was very great, and the bureau proved of tremendous value in securing positions for them throughout the State.

THE FIRE AND EARTHQUAKE.

It was the terrible fire and earthquake which visited San Francisco in 1906 that demonstrated the spirit of fraternalism, that cemented the bonds of friendship, and that gave opportunity for the development of that great benevolence which has knit together the organization into a solid, united whole for all time. While mother earth yet trembled and the fires crackled and surged unchecked, "the boys" sought each other to offer such assistance and relief as the occasion permitted. It was the drug stores that were invaded by the authorities, drugs, medicines, and surgical supplies were needed for the afflicted, and the skilled services of the drug clerk were commandeered for the relief in hospital and camp. While serving willingly and faithfully at their respective posts, they managed in their moments of relief from duty to organize a "clerks' committee." Through the activity of our International Secretary Brother Max Morris of Denver (since gone to his just reward), and the generous response to his call, and also from the moneys sent to the State by the drug in-

terests of the country, a very considerable sum was raised, which enabled us to help our many members in distress, not only for a day or a week, but to some very unfortunate ones it lasted for some time and was a godsend, for many lost their all. In a number of instances money was advanced to aid a sufferer in getting on his feet again. In some cases this was returned; in others, where refund was impossible, the obligation was cancelled with a hearty Godspeed.

THE TEN-HOUR LAW.

For years past proprietors as well as clerks have felt the burden of the long hours required by our calling, and all agreed that such long hours were not an absolute necessity. No one knows better than the clerk behind the counter how physically exhausted and brain-weary one grows after fourteen or fifteen hours of almost consecutive work in a drug store, and that these long hours in such responsible work become, by their effect upon the clerk, a menace to public health. Our organization, therefore, determined to ask legislative aid in procuring relief. After advising with some of the older heads among the proprietors, including Prof. Wm. M. Searby, Messrs. S. A. McDonnell, E. L. Eschmann, Isaac Grant and others, and receiving their sanction and moral support, a bill was drafted, and by Hon. Edward I. Wolfe, State Senator from San Francisco, was presented to the legislature. In 1905 the legislature passed this bill, it was signed by Governor Pardee, and became effective in April of the same year. This measure became familiarly known as "the ten-hour law," and from the date of its enactment the drug clerks of California were required by statute to work "not more than an average of ten hours a day or sixty hours a week of six consecutive calendar days;" thus in helping ourselves, we were able to extend the benefit of shorter hours to clerks who were not affiliated with us, and what was of far greater importance, give the protection to the public which the better physical condition of the dispenser enabled him to render.

SUNDAY CLOSING.

In the history of pharmacy it has been the wonder, not only to the proprietor and clerk, but to the public as well, why druggists should be compelled to work all day Sunday. It was left to the California Drug Clerks' Association to make the investigation, and upon their

initiative the problem was solved. Some of our active members took the matter up with the proprietors, and with the coöperation of gentlemen standing high in the pharmaceutical and business world, such as Prof. Frank T. Green, Messrs. Val. Schmidt, J. J. Mahony, E. L. Baldwin, Frank Gay, *et al.*, who willingly gave not only their time but their influence, an arrangement for Sunday closing was consummated with the two hundred odd drug stores of San Francisco, most of whom close between the hours of 1 and 5 P.M., and some from 1 to 6 P.M., on the Sabbath. It did not take long for this example to be followed by our neighbors across the bay, and in Oakland, Alameda and Berkeley the same rule is followed. Stockton, Sacramento, San Jose, and Los Angeles have fallen in line, and in many of the interior cities and towns those who are engaged in the dispensing of drugs and medicines are reaping the benefit of the good seed sown by our association.

INCREASED COMPENSATION.

With the increased cost of commodities necessary in the expenses of life, which has been experienced all over the country, it seemed hardly reasonable to ask a drug clerk, who has to devote five years to practical experience, also a vast amount of time, money and mental energy in acquiring an adequate knowledge of such a technical business as pharmacy, to accept in consideration for his services a compensation that was entirely inade-

quate to meet the demands, and in no way proportionate to the wage paid in many lines of work of no technical character, and with little or no responsibility attached. The association, therefore, decided to make an effort to procure an increased compensation for those employed in a clerical capacity in pharmacy. Not desiring to assume a dominant attitude, however, they took this question up with the proprietors, enlisting their coöperation and requesting their views. With this end in view, a communication was sent to a very large number of proprietors asking their ideas on the subject of compensation. The number of replies received was exceedingly gratifying, and upon tabulation it was found that 78 per cent were in favor of the following schedule, viz.: for Licentiates in Pharmacy a minimum of \$100 per month; for Registered Assistants a minimum of \$75 per month; for relief work, 50 cents per hour. This schedule was adopted as the minimum of the association, and has been effective ever since March 1, 1907.

SUMMARY.

To briefly summarize the benefits accruing by the organization of the drug clerks of this State, we give the following:

(1) Shorter hours. (2) Better compensation. (3) Financial sick benefits. (4) Financial death benefits. (5) Sunday closing. (6) Employment bureau. (7) Social and fraternal features. (8) Representation on the Board of Pharmacy.

CONDUCTING A DRUG-STORE OPENING.

How Long Before the Event Should the Advertising Be Started?—What Tone Should the Publicity Have?—Some Ads. which Have Been Used by Retail Druggists to Announce Their Openings.

A store opening represents a means of making a dramatic and effective entrance upon the public stage. And as the star who enters a play at the psychological moment has the way carefully prepared for him, so the audience of a store must be worked up to a state of expectancy before the event occurs. Continuing the comparison, druggists who would make the most of an opening must have the stage dressed, their tableau ready, their preliminary lines spoken, their audience expectant if the event is to make any special impression.

This confronts us with the question as to how long before an actual opening the druggist should begin his preliminary advertising. Writing in *Printers' Ink*, George Hough Perry, a prominent advertising expert in the East, observes that too long a preparation, a suspense too long drawn out, will lose one the keen attention of the public. On the other hand, an entrance too abrupt, unexpected, and too early will find the public unready and cold. No definite rule can be laid down. Each case must be decided on its own conditions, but the

time should be long enough to enable the proprietor to deliver his message. Four days may be sufficient. Often two days will do, although some take a week for the preliminary advertising. B. S. Cooban & Co. begin advertising ten days before their regular annual opening, as do many other firms.

Having determined the date of the announcement, the next detail to be considered is what tone it shall take. This question can best be answered by actually reproducing specimens of advertisements that have been employed by retail druggists for their openings.

Mr. Barrett, of Waukegan, Illinois, conducted a grand opening in which he gave away prizes of candy and cigars. The conditions under which these gifts were distributed may be seen from the cover of their four-page announcement. It read as follows:

GRAND OPENING

OF

Barrett's Drug Store

WAUKEGAN, ILL.

on Friday and Saturday
Oct. 18th and 19th

A COMMERCIAL EVENT THAT IS BOUND TO
CREATE MORE THAN PASSING INTEREST

FREE FLOWERS

FREE CANDY

FREE CIGARS

Great Values
on
Opening
Day
OCTOBER
18th & 19th

LADIES

EVERY lady who calls on the Opening Day will receive a blue numbered ticket. On Monday, October 21st, we will open the large blue envelope displayed in our store and post the 5 unknown numbers which it contains. Each of the 5 persons presenting a blue ticket bearing one of these numbers will receive a fine fresh 1-pound box of **Craftsman Club Home-Made Chocolates**.

YOU MAY WIN

Surprise Bag
FREE

To every caller upon this Opening Day we will present with our compliments a Surprise Bag containing many—? Ah, that's the surprise! Don't fail to get one and you will be delighted with your surprise.

Remember the days of the Opening
**FRIDAY and SATURDAY
Oct. 18th and 19th**

**SPECIAL PRICES
SPECIAL FEATURES**
in a modern, progressive drug store

Barrett's Drug Store
WAUKEGAN, ILL.
Cornwall and Madison St.

Great Values
on
Opening
Day
OCTOBER
18th & 19th

GENTLEMEN

EVERY gentleman who calls upon the Opening Day will receive a red numbered ticket. Monday, October 21st, we will open the large red envelope in our store and placard the unknown number thereon. To the gentleman who brings in the red ticket bearing this winning number we will present a box of **Ben Bry Clear Havana Cigars**.

YOU MAY WIN

The cover of a four-page folder distributed by Barrett's Drug Store, of Waukegan, Ill.

Every visitor received a surprise bag free, as was cleverly announced in the circular: "To every caller upon this opening day, we shall present, with our compliments, a surprise bag containing many—? Ah, that's the surprise! Don't fail to get one. You'll be delighted."

A preliminary announcement is of course advisable. The first ad. or circular should appear about ten days before the opening after the manner of the following:

WAIT AND WATCH
for the
GRAND OPENING
of
BARRETT'S DRUG STORE
Waukegan, Illinois.

This will be an Opening of far more than passing interest. Preparations are under way to make this affair an assured success. For we want everybody in Waukegan and vicinity to appreciate the

**New Ideas, New Methods and
New Atmosphere**

that will make this a first-class progressive Drug Store in every sense of the word. Your money will do its utmost here—always with goods that are standard and reliable, and on the Opening Day there will be

**Free Candy, Free Flowers
Free Cigars
Free Surprise Bags**

And the date of the Grand Opening is
October 18 and 19, 1907
BARRETT'S DRUG STORE
Waukegan, Illinois

COMING

The biggest "Coming Event" in this town—the happening that is going to make everybody "sit up and take notice"—the one occasion you mustn't miss "nohow" is

_____ 's

Souvenir Day

Saturday, February 17th, is the date—put a big mark around that day on your calendar so you won't forget—you'll be mighty sorry if you do forget.

Specimen ads. or circulars to be sent out about 10 days before the opening.

Two days later, or about the eighth day before the opening, the advertising becomes more specific, the following text being very suitable:

Have You Heard About It? Make a Memorandum Regarding the
GRAND OPENING, OCTOBER 18th & 19th, 1907
OF
BARRETT'S DRUG STORE, WAUKEGAN, ILL.

Free Flowers

Free Candy

Free Cigars

Free Surprise Bags

—Extra Preparations Being Made for this Event—

In order to fittingly prove to the public of Waukegan and vicinity that in Barrett's Drug Store there is a business institution operated on the very first principles—that it is aggressive, progressive and in every respect "up to the minute" we shall on

OCTOBER 18TH AND 19TH HOLD A GRAND OPENING
TO WHICH YOU ARE CORDIALLY INVITED

FREE!

Flowers,
Candy,
Cigars,
Surprise
Bags.

There will be special prices for that day as well as many special features. If you want to see an interesting mercantile event come around, if you wish to observe how a strictly first-class Drug Store is operated, pay us a call. If you want to save some money, in Drug Store purchases don't overlook us this day.

FREE!

Flowers,
Candy,
Cigars,
Surprise
Bags.

BARRETT'S DRUG STORE,
201 GENESEE STREET. MURRAY BLDG, WAUKEGAN.

A newspaper ad.

T. A. Goodwin on purchasing a store in St. Louis, Michigan, observed his entrance into the new place with a formal opening. The

general character of the celebration may be seen from the following announcement, which appeared in a folder printed especially for the occasion:

FREE SOUVENIRS FOR ALL

EVERY VISITOR—old and young of both sexes—who comes to my new store on Opening Day will receive a beautiful **FREE SOUVENIR**. There will be souvenirs for the Ladies, souvenirs for the Gentlemen and souvenirs for the Children. There will be Free Candy, Free Perfume, Free Toilet Preparations, Free Cigars, Free Cigar Cutters, Free Match Boxes, Free Novelties, Special Offers, and many other features which will make this Opening Day an event long remembered in St. Louis. Do come in on Opening Day.

Souvenirs for Ladies—Souvenirs for Gentlemen—Souvenirs for Children

Free Candy—Free Perfume—Free Toilet Preparations

Free Cigars—Free Cigar Cutters—Free Match Boxes—Free Novelties

Of course, Mr. Goodwin took pains to impress upon people through his advertising that the store had been overhauled from top to bottom. He assured his customers that many changes and improvements had been made, and impressed upon them the completeness, freshness, and superior character of the stock. All this was accomplished through the medium of a four-page folder 7 by 10½ inches in dimensions. The paper was blue, the type a dark shade of the same color.

A formal invitation can be sent out to a restricted number of people, one on this order, for example:

Your presence is cordially invited
at our

GRAND OPENING

FRIDAY AND SATURDAY

October 18th and 19th

During which flowers, souvenirs, special sales and many unusual attractions will be in order. Particulars may be had from our circular of information.

BARRETT'S DRUG STORE

Genesee and Madison Sts.
Waukegan, Illinois

B. S. Cooban & Co., of Chicago, have even used a huge bill-board ad. 2½ feet wide by 3½

feet high. The paper was white, the letters being done in blue and red:

COOBAN'S GRAND FALL OPENING

OCT. 5-6-7

Free Souvenirs

Free Perfumery

Free Candy

Free Cigars

Splendid

Specials

Wonderful

Values

B. S. COOBAN & CO.

459 W. 63d Street,

CHICAGO, - - - ILLINOIS

In the November BULLETIN, 1911, we described an opening conducted by the Cahoon-Lyon Drug Co. of Buffalo. Flowers and toilet articles were given away free as souvenirs to the visitors. At the soda fountain a popular drink was served free. In many departments valuable presents were given to purchasers. More than 10,000 roses and asters were given away throughout the day, and toilet souvenirs were distributed liberally. The various sections of the store were arranged in an attractive fashion, and the clerks did a record-breaking business. This only goes to show that an opening can be made the means of stimulating business.

During the opening of the new Cahoon-Lyon store 5000 hot-air balloons were released on the roof. Each balloon contained a check good for a certain sum of money when presented at the new drug store. These checks ranged in value from ten cents to \$10, and were eagerly looked for in all parts of the city. Finders of the checks from the Cahoon-Lyon Company balloons could exchange them for currency or merchandise, according to the statement contained on the paper. Checks were received at the store.

STOPPING LEAKS IN BUSINESS.

A Retail Druggist of Long Experience Shows How Losses of One Kind or Another Can Be Prevented—A System of Stockkeeping Whereby One Can Tell the Amount of Merchandise on Hand Each Day.

By JULIUS DEETKEN.*

Now, what I am going to tell you comes from an old druggist who has been in active business forty-one years, who is nearly at the end of his active business life, and who considers his system of discovering and preventing leaks and losses almost perfect for a small drug business.

This old druggist, who has in a moderate degree succeeded after many reverses and some crushing financial disasters, in accomplishing that for which we all put forth our best efforts, namely, to spend old days in peace and comfort and free from any financial worry, gives you now his experience in that direction. But this is not in a spirit of boastfulness. Far from it. He has no doubt that some of you here have as good or a better system. He expects that his system will be criticized and that some one, at some time, will offer you something much better.

If I can to-day, by giving you my own approved system, assist any of you in making your burden lighter and your bank account heavier, I shall feel amply rewarded for my efforts.

Many of the losses and leaks in business which we see occasionally mentioned in our drug journals are a negligible quantity and I shall not take any notice of them to-day. The leaks and the losses may be divided into two classes, to-wit:

First, losses and leaks caused by others.

Second, losses and leaks caused by ourselves.

Right here I confess that I failed and fell down in most of those side-lines of which some of you have made a most decided success, and that the volume of my business, with the exception of a few years in Deadwood from 1877 to 1881, was distressingly small.

MAKING A SMALL BUSINESS PAY.

I soon realized that the problem before me was to make the most out of a naturally very

small business, and to look for my success, not in enlarging my business, but in getting every cent out of this five- or ten-cent patronage called the drug business. I had to squeeze that lemon dry to the last drop to make a good decent living, and to lay up a few dollars for the rainy days that come to us all.

Very early in my career I ran up against a very dishonest clerk, and I at once began to work out a system by which I could discover and stop a stealing clerk. My system, which I have practiced now more or less for over thirty years, and which I have perfected, so that during the last fifteen or twenty years I have had no occasion to change it, is an absolute prevention and cure for this evil. It is best adapted to stores with one or two clerks. For those of you who have a larger number of clerks I would say this, you can discover the leaks, but you cannot fasten it on the thief. I will also say here that in spite of my system, you cannot stop a man from stealing for a short time, but you can discover the leak inside of a few months and stop it then. Then, too, the fear of discovery will stop a thief from stealing as soon as he gets familiar with my system. No man can steal in my store for more than a few months without the fact being discovered by me. You are all familiar with the case of a trusted, confidential clerk in a large town in eastern South Dakota, who carried on this stealing for many years and robbed his employer, during that time, of many thousands of dollars. That same clerk was working for Bent & Deetken in Deadwood long before he was discovered to be a thief in the eastern part of the State. But I assure you he did not steal when he was working for Bent & Deetken. He was afraid of our system.

My system answers completely the following purposes:

First, you always have cost prices of goods at your finger-tips.

Second, at the close of each business day you

*A paper read before the last annual meeting of the South Dakota Pharmaceutical Association.

know to a cent what you have sold, the cost of what you have sold, your gross profit, and your net profit.

Third, at the end of your business day you can find out if you wish, to a cent, the amount of merchandise on hand that day.

I verify the correctness of my system by taking invoice once a year, generally in January. I balance my merchandise account and write on a sheet of paper the amount shown in ledger to be on hand that day, and put the paper in a sealed envelope. I let two men take the invoice and figure it up. At the end of the work, I hand them the sealed envelope to compare their footings with my figures, and usually the discrepancy is not more than \$50 or \$75. If you have a leak in your business that has not been detected during the year, it must show up at the time of invoice. The key to my system is a sales-book ruled with three columns, one for cost, one for selling price, and each article sold, cash or credit, is entered. To illustrate:

You start on January 1. Your sales-book shows that you sold that day.....	\$20.00
Your day-book shows that you sold \$3.00 credit, so you deduct.....	3.00
Leaving a balance of.....	\$17.00
Your day-book shows you collected that day....	5.00
Adding this gives you the result that must be in the till	\$22.00
Plus a few minor omissions of 75 cents to \$1.00.	

You see if you omit to enter any sales on your sales-book, your cash must over-run, and in place of \$22 you will have \$23 or \$24 cash in your till. This is normal. If you run short, then look out for leaks. You may run short once in a while by making a sale, say about \$1 or \$2, on credit, entering it on the sales-book but neglecting to charge it in the day-book. By my system a loss of that nature, due to carelessness, is discovered.

By way of a second illustration, I submit the following figures. They are hypothetical, of course. They show how it is possible for you to know every night, to a cent, what you made or lost that day:

January 1, your total sales I suppose to be.....	\$20.00
Cost of your goods as per cost column.....	10.00
Leaving a gross profit of.....	\$10.00
Less your total expenses.....	5.00
Your net profit is plainly.....	\$ 5.00

Apply this rule or system to your monthly

or annual sales, and you have the exact result of your business, provided there is no leak.

Let me illustrate a third time. This is the most important and gives you an absolute check on amount of merchandise you have on hand each day:

January 1, amount of merchandise on hand....	\$1000.00
Added to stock during the twelve months, at the rate of \$300 per month for new goods.....	3600.00

Add these and they amount to.....	\$4600.00
Now deduct (or credit) sales \$20 per day, cost \$10, or \$300 per month or \$3600 per year.	
Carry out	3600.00

December 31, on hand.....	\$1000.00
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If you run short more than \$50 there is a leak. Some one robs you or you rob yourself.

My rule is to check up the sales every day, figure up monthly sales, gross profits, net profits, cost of goods, credit the merchandise account by the cost of goods sold, debit the merchandise account to the amount of all goods received during month, and strike a balance to show the amount of merchandise on hand on the last day of each month.

LOSSES DUE TO SELF-INDULGENCE.

Now we come to losses and leaks caused by yourself and how to stop them. Suppose you, Mr. Druggist, are a smoker and take a seven-cent cigar five times a day out of your cigar case, without paying for it because it is such a small item.

Five cigars per day, costing seven cents each, amount to thirty-five cents a day, or, in the year, to	\$127.75
Your family eat ice cream, drink soda water, etc., "on the house," May 1 to September 1, 135 days at 25 cents per day, amounting to, during the season	33.75
Your wife and children take hair brushes, tooth brushes, soap, toilet articles during the year that cost about.....	40.00

Figuring up, these things cost per year.....	\$201.50
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Now, you are short \$201.50 in your merchandise at the end of the year, and you can and must stop that by charging every item taken for yourself and credit your merchandise account at the end of the year by \$201.50 and charge your family expense account \$201.50. Or still better, and it saves you a lot of entries, do as I do. Pay the cash, a little above cost, into your till every time you and your family take ice cream or cigars, or whatever it may

be, out of your stock. Then this leak is stopped.

Another form of robbing yourself is if you allow any doctor to help himself to cigars or drinks or other small items whenever he sees fit, because he sends you two or three prescriptions a day. Do not do it. It is easy to rob your stock of fifty cents per day or \$182 per year this way, and it is a big mistake. If your doctor is entitled to any such benefits and wants them, give him the cigars and drinks, etc. Pay for it yourself and charge it up to expense account. This will keep your merchandise account straight.

Now, Mr. President and Fellow Druggists, I will say to you before I close that if I had to point to any one thing to which I owe my moderate degree of prosperity, after all my ups and downs, I would point to my system of discovering and stopping losses and leaks. It has never failed me, and I intend to keep it in use to the end of my business life.

My system of sales-book enables me to know every night to a cent what I have made or lost. My system of keeping merchandise account enables me to know every day of the year the exact amount of merchandise I ought to have on hand, and in two days I can, by my invoice, verify the figures in the ledger and discover the leak.

There are many other ways that help a druggist to detect pilfering. A friend of mine discovered stealing in this way: He left just \$5 change in the till at the close of business. Then he hired a person next morning early to buy \$3 worth of goods in his store. Then he stepped in and counted the money. The till had just \$5, and the guilty man was discharged.

Another friend of mine is using the following tactics: He always keeps wrapping paper and twine of different colors from any of his competitors. If he is on the street and meets a person with a white paper package tied with pink twine, he knows that the package comes from his store. He goes up to his sales-book, and if he finds the entry he knows everything is all right. If not, he becomes suspicious and usually discovers the leak and stops it.

Another friend of mine who is using my system discovered a big leak as follows: One of the help, it seems, was in the habit of pocketing money that came in after the proprietor went home at night. He took \$3 one night. Next day the customer brought the

goods back, as it was not what he wanted. My friend looked at the sales-book. There was no entry of a sale, and there was no over-run or surplus of \$3 the night before. My friend said nothing, but stepped out of the store for half an hour. He came back, looked at the sales-book, and found that in his absence some one had attempted to "doctor" the sales-book in a bungling manner. The guilty man was discharged.

HANDLING CREDIT BUSINESS.

Now, in regard to credit business, I have succeeded in reducing it to a minimum. It is one of the comforts of my old days. I have not been out collecting nor sent a clerk out for the past four or five years. Now I think every store has to handle this branch of business to the best possible advantage, according to circumstances.

The druggist who lives in a small town where he knows everybody and is doing a good prescription business can hardly avoid doing a big credit business. But a druggist who is doing a very small prescription business is not obliged to let goods go out of his house on credit. I send all of my bills or statements through the mails. I have always a few lame ducks on hand, and I use very plain language when I am telling them my rules about credit. I do not allow my clerk to give any credit except to good people. As a last resort I give my bills to a justice of the peace and usually collect them by bluff, hardly ever by suits. My net losses have been about \$30 per year for the last ten years on bad accounts. I try to be a good payer and a good collector. There is no set rule about collections in my store. I consider each case by itself and use different kinds of strategy, according to my own judgment, and people in Deadwood call me as good a collector as I am a payer.

Now, in Lead, conditions are entirely different. They are all doing a big credit business and everybody promises to pay on pay-day. Nobody pays on the first of the month. The Homestake Company pays off their three thousand men at the rate of about 200 per day for fifteen days, commencing on the 8th and quitting on the 24th. The trick in Lead and Brown is to catch the debtor on his pay-day; for the chances are that one or two days later he will not have a penny, and you will have to wait another month.

In the early days of Deadwood, we had an

entirely different custom in regard to credit and pay. We sold goods on credit to everybody who wanted them, and the test of a man's quality as a payer came every Monday.

Monday was pay-day, and you could see everybody go around collecting, with buckskin sacks to carry the gold-dust in. A man who did not pay on Monday lost his credit promptly.

A NEAT VALENTINE WINDOW.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Last February I arranged a very pretty window display of valentines. It was simple, too. I took pains to avoid the use of too much material.

Valentines of a heart-shape design gave a nice effect to the trim. In the center, arranged on inclined steps, appeared four rows of beautiful post-cards patterned after the fashion of

They were cut out of white heavy cardboard and hung on the background, and showed up very well against a somewhat wide red border.

Taking it all in all, the trim proved a very profitable one from a financial standpoint. We do not expect to make anything great from this line. Of course it pays a profit, but the



fancy valentines. They were of the better sort, the prices ranging from one to 25 cents. Some care was given to the background, too. It was made of dark-red paper and then trimmed with white. In the corners was latticework painted white.

At the top of the trim I arranged the smaller valentines on cut-outs that resembled hearts.

main point in the whole business is that it brings in the people, and that is what counts in the small store as well as the larger ones. Then we must see to it that the general arrangement of the store will be such that the customer who has come primarily to buy valentines will be led to consider other inducements that we have to offer him.

SHOW-CARD WRITING.

Words of Encouragement for Those Who Have Not Yet Tried Their Hand at It—A Few Points About Lettering—Specimen Signs that Were Done in Colors by a Self-confessed Novice at the Work.

**By W. E. PRICE, Ph.G.,
Toronto, S. D.**

I have read with much interest the many articles published in the BULLETIN OF PHARMACY on show-cards and show-card writing. Personally I am an ardent believer in the efficacy of show-cards, as I am in all forms of advertising. I never fail to have show-cards displayed from every available point of vantage in my store.

I am one of the poor unfortunates who never had a lesson in drawing. Nor have I ever had any instruction of any kind in the printing or writing of show-cards. Furthermore, I am one of the nervously constituted persons who have not the patience to put much time or trouble in fussing about little things. Consequently I presume my work shows the lack of painstaking care. However, I make my cards attract attention, and that is what counts.

LETTERING IS NOT DIFFICULT.

My ordinary lettering is not pretentious and represents something any one can do. When completed it is odd to the layman and really neat. I make a backhanded, downward stroke for each letter, ending with an upward jerk at the end. The first appearance of the word "letter" would look like Fig. 1. When completed it would represent Fig. 2.

By placing a dash of a contrasting color in the bottom angles between the letters, a nice



Fig. 1.

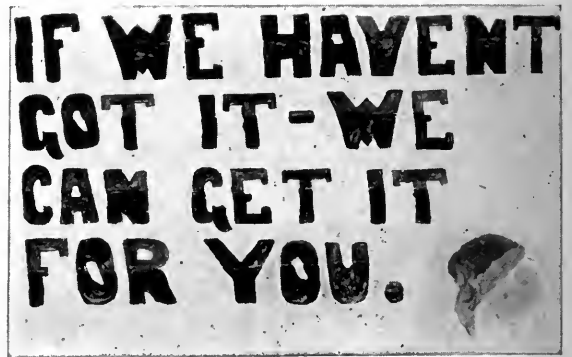


Fig. 2.

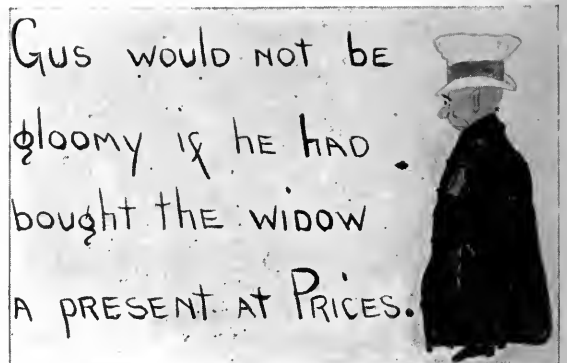
effect is obtained. This style of lettering can be done by any one with ten minutes' practice. It is surprising to see how neat and showy an

effect can be obtained. I find, too, that by making block letters and using contrasting colors for the top and bottom halves of letters, a striking card can be made.

Again let me state I have never taken a



lesson in drawing and never until this year attempted this kind of work. I copied in freehand the large pictures of the comic supplement heroes—Hooligan, Gus, Hans and Fritz, etc., and colored the copies with show-card ink and water-colors. I will venture to



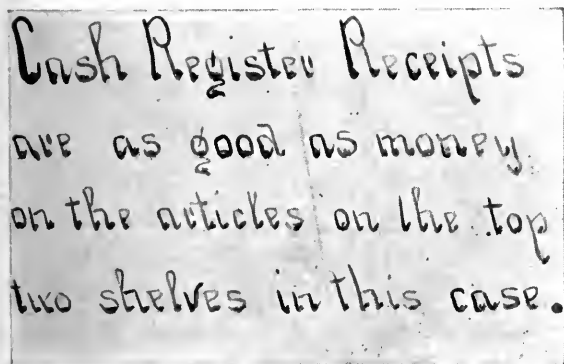
say there have not been a dozen people in my store who have not noticed, read, and spoken of these signs. Most of them inquire for the artist and refuse to believe that I am guilty. To one who never tried anything of the sort until this year, and did fourteen cards in

spare moments in two days without spoiling a piece of cardboard, it seems ridiculously easy indeed.

I am sending you an example of each kind of show-card that I make. If I, with my limitations, can make show-cards which pay, any one can.

SOME NOVEL CHRISTMAS ADVERTISING.

Another subject of interest on which I should like to see more articles is advertising. I venture to say I spend 50 per cent more on advertising than the largest general store in my town, and I have carefully classified the results. My trouble has been to get people to *read* what I have to say. This year in my Christmas letter to my patrons I placed a number in an inconspicuous place, made with my Bates machine, the duplicate of which I placed on a small piece of cardboard. On the outside of the envelope I had printed: "This envelope may contain a \$2.50 gold piece.



Cash Register Receipts
are as good as money
on the articles on the top
two shelves in this case.

Read every word. The National Bank will pay some one for the trouble."

I submit a copy of the letter. The banker drew the lucky number and paid the man who presented it. Two days before I mailed my letters, I posted streamers all over town, "Who's got the Lucky Number?" This attracted more attention to me, caused more stir and talk, and gave better results than any scheme I've ever tried. And the number being almost hidden required reading and search to find it.

Would not some letters from your subscribers on advertising in its various forms be interesting? I for one should be glad to read of others' experiences in that line, as I have carefully classified my advertising, and can answer in my own case, so far as one is able, what pays and what does not.

DOLLAR IDEAS

MARKING RECORDS OF PURCHASE ON THE GOODS.

J. F. Rupert: I notice in the September issue of the BULLETIN for 1911 an account of the sticker which Sherman & McConnell of Omaha place on packages, stating the contents, the amount, from whom purchased, the price, and similar data. A scheme I always use is to stamp every article with the date of invoice. Goods like tooth-brushes upon which it would be hard to write the date are placed in a box and the container marked with suitable data. This enables one to tell how old an article is, or at least how long it has been in the store. And on this information one is enabled to arrange his stock so as to dispose of old articles first, keeping his goods as fresh as possible.

While I always placed the name of firm from whom purchased on the original packages, boxes, crates, etc., I did not make such record on patents, for instance, purchased in broken dozen lots. In these cases the dates on the individual packages assisted in determining what firm was responsible when it was necessary to make claims for defective or deteriorated goods, as we must often do.

Some may object to stamping goods with a rubber date stamp for the reason that customers may get onto the scheme, but the following plan overcomes that objection:

For January 1 or 5 or 20 mark as follows: 1x0111, 1x0511, 1x2011. For November or December 5 we may write 110511, 120511. No one can decipher this code. The last two figures indicate the year; the first two, the month. The second figure will be an "x" or other character for the reason that only the last three months have two figures in the number of the month. When the day of the month is less than two figures, the third figure of the date number should be an "0" or other character—January 5, 1911, 1x0511.

I think this ought to be clear. It will take slightly more time to date goods, and is of much value in conducting business. It is a little job for one of the junior clerks who will be on the job of checking goods and marking. Any ambitious clerk will take eagerly to such a scheme as this.

A METHOD FOR FILING PRESCRIPTIONS.

W. A. Brabrook, North Berkeley, Cal.: Here is a convenience I use in my prescription room. It will save time for those who use the box system for filing prescriptions.

On the face of each box appears, of course, the numbers of the prescriptions contained within. But in addition, I put a key number on the side of the box corresponding to the

11	11	150501 155500	155501 160500	12	12
9	9	140501 145500	145501 155500	10	10
7	7	130501 135500	135501 140500	8	8
5	5	120501 125500	125501 130500	6	6
3	3	110501 115500	115501 120500	4	4
1	1	100501 105500	105501 110500	2	2

number on the edge of the cabinet. So without studying the numbers to see where a certain box belongs, I simply put box No. 6, for instance, in the compartment marked No. 6.

In this way we discard the confusing numbers and locate the place simply by the key as shown in the rough illustration. Boxes are added from time to time to the top, so that the numbers naturally begin at the bottom.

CLEANING A PANE OF GLASS WITH WOOD ALCOHOL.

W. T. Beam, Moundsville, W. Va.: One evening while putting some tungsten electric globes in our windows, I noticed that the glass was very dirty from a deposit of grease, etc., caused by the gas we burn for both fuel and light in the store.

I immediately took the black cotton batting which is packed around the light, dampened it with wood alcohol, and with little effort cleaned and polished the glass, thus doing

away with water and the dirt and trouble caused by them. As we must go over our store at least once a week and clean all glass, this makes the work about one-fourth as much as it is ordinarily.

A SAFE WAY TO DISTRIBUTE SAMPLES.

A. L. Remington, Silver Springs, N. Y.: Many towns have ordinances against the distribution of samples unless they are placed directly in the hands of an adult. In my town we cannot leave a sample where it can be picked up by a child. I use a special slip, attaching it to the sample with a rubber band:

The village board does not allow samples to be distributed unless they are placed inside of the houses. This is our only excuse for calling you to the door to receive this sample. It has merit, and we hope that you will be so well pleased with its use that you will readily forgive us for any momentary annoyance we may have caused you.

REMINGTON'S PHARMACY.

This allows me to distribute my samples of foot-powder, cold cream, etc., without violating the law or provoking the housewife.

A CONTAINER FOR SMALL STOCKS OF FLAXSEED MEAL.

W. G. Epplen, Omaha, Nebraska: Many stores buy only five or ten pounds of flaxseed meal at a time, and then have no good place to keep it. A container can be made by removing the top hoops of a ten-gallon Dickinson witch-hazel keg. Take the head out in one piece, replace the hoops, drive a nail through a No. 8 cork and into the center of the head of the keg. This serves as a handle. Put a large cork in the bung-hole, and you then have the best possible container for five or ten pounds of ground flaxseed meal. The meal retains all its oil, as the inside of the keg is coated with paraffin.

USING OLD CORKS.

Stewart T. McGee, South Berkeley, California: Money may be saved in corks by using the old ones over again, especially the large corks that come from emptied stock containers. In putting up an order, a large cork is

often needed. I mean corks from number 10 to 18, and the many sizes of flat ones; hence the necessity of keeping a stock on hand.

If you will keep a box for large corks instead of throwing them away, they can be made like new in this way: Rinse them, put a piece of paraffin-paper beneath, and rub the top over a piece of No. 1½ sandpaper. The sandpaper takes off the dark, dirty layer, leaving a bright new surface, while the paraffin-paper gives the rest of the cork a perfectly sanitary and at the same time neat looking covering.

TO WASH SHOW-CASES.

D. v. Riesen, Ph.G., Marysville, Kansas: The washing of show-cases, especially the floor-case, usually requires a lot of time, particularly the inside glass. This work can be done easily by employing the common rubber window mop. Do not be afraid to use plenty of good water with a little ammonia, and then proceed as though washing a large window. In a little while one will, with a little care, be able to save a lot of hard work, and what is often more valuable, time. I have used this method for several years and find that it works to perfection. I would not think of going back to the old way.

A GOOD CLEANING CLOTH.

O. N. Sprague, Pawnee, Ill.: Get a yard of cheese-cloth, moisten it with benzine or gasoline, and use it as a dust-rag and polisher on glass, nickel, and woodwork. The labor saved and the polish obtained are surprising. This rag makes the whole store look like new. Use it once each day, or when needed, and you will cover a multitude of sins.

Some Stomachs Have This.—

An amylase has been separated from pancreatin which will digest 400,000 times its weight of starch in forty-eight hours, or form 6000 times its weight of maltose in twenty minutes. It was prepared by extracting the pancreatin with 50-per-cent alcohol, precipitating with absolute alcohol and dialyzing.

Rhubarb.—

Tutin and Clewer say that rhubarb contains rhein, emodin, aloë-emodin, rheinolic acid, and a non-glucosidic resin, and that the chief purgative principle is the non-glucosidic resin. Aloë-emodin and chrysophanic acid have purgative properties, but the other constituents are physiologically inert.

SELECTIONS

OPPORTUNITY LOST.

The biggest mistake that the average retail druggist makes in his effort to increase his business is due to the fact that he absolutely fails to tie his store, in any noticeable way, to the well-placed advertising that every moment of every day is informing hundreds of his "could-be" customers of the many good points in favor of the good things that line his shelves.

Why not put your ear to the ground and heed the rumbling of the business that is being generated by the tremendous amount of money that is spent on advertising, the electric spark of the business world, the thing that molds public opinion? The force of that advertising is greater than we can readily grasp, and still the average retailer goes along trying to be happy and successful on thirty cents' worth of business; when a bigger trade is within his grasp, if he will only adjust his harness and drive out of the rut.

Why not, as a beginning, take the pages of the magazines and the daily newspapers, containing the advertisements of the articles already on the shelf, and paste them attractively in your window, with an appropriate catch line, indicating that you have the very latest fad or fancy within easy reach? Even passing attention to details of this kind would soon show results, and to persistently employ such tactics, changing them as conditions warrant, would certainly work wonders in the shape of good business the effort would create. Try this suggestion for thirty days, and do it enthusiastically, and you will hear the constant tinkle of the cash drawer, and the answer will always be "ready money!"

It would be a mighty hard matter to compile figures that would even approximate the total amount of money that is being spent by reliable manufacturing concerns to establish a better understanding of their goods in the minds of the buying public; but for argument's sake, it no doubt will be granted that it is a mighty big pile. It will be readily granted, too, that the business-producing force of this persistent advertising is something that must be reckoned with, and not just merely passed by for the want of a personal reason to investigate. If

the average merchant will take ten minutes by the clock to reason out the excuse for this advertising, what it has done in building up so many concerns, he will be apt to realize that to tie even a decimal part of those well-thought-out business announcements to his individual store would not be a half bad move, after all.

Take the newspapers and magazines, as they all come out from day to day and month to month, study the advertising pages carefully, get the reason, get the gist of things that you are bound to have calls for. Write the manufacturer who pays the bills for more information; ask for his selling plans, even if you do not contemplate buying; ask for those well made cuts that you may use in your own local advertising. Question the manufacturer from your point of view, from your knowledge of local conditions, get posted, cultivate a bit of optimism, and then apply one-tenth of what you gain to your own business. In other words, just harness your store to the other fellow's noise while he is paying the bills, and profit by the degree of ingenuity that you employ from time to time.—W. C. D'ARCY in the *Practical Druggist*.

LIGHT CIGARS NOT THE MILDEST.

Probably there is not one smoker in a thousand who is not surprised and, in fact, incredulous when he is told that the color of a cigar is absolutely no guide to its strength. Yet such is the case, and a fact well known to cigar manufacturers and importers. The belief of smokers that cigars of dark color are strong and those of a lighter shade are milder, is, in point of fact, as fallacious as it is general. This is but one of many delusions harbored by consumers of tobacco, and which practical cigar men smiled at and indulged from time immemorial.

But of recent years the inclination of smokers toward light-hued cigars has assumed the proportions of a "craze," and the producers are finding much difficulty in meeting the demand. The manufacturers and Cuban tobacco raisers would now gladly correct the error; but after having carefully classified their products under the style of claros, colorados, maduros, etc., for decades, they find it next to impossible to dispel the delusion.

A maker of Havana cigars uses but one grade or blend of tobacco in the body or filler of his cigars. Exactly the same stock is used

in his Conchas as in his Perfectos; in his claros as in his maduros. After the cigars are made, however, his "selector" takes them in hand and classifies them according to the relative shades of the wrappers. This is done to effect a uniformity in the appearance of each box of cigars, and to enable the dealer to readily indulge the whims of the self-deluded smoker.

Inasmuch as the wrapper constitutes not more than one-tenth of the cigar, it will readily be seen that the degree of its strength or mildness is very inconsiderable in effect. In this connection, however, it is interesting to note that tobacco tradesmen versed in the intricacies of the industry rigidly bar the light-colored wrapper from their own smoking tables, knowing that it generally indicates that the leaf was prematurely cut and improperly cured, and that it impairs the flavor and burn of the cigar. Cubans, who, by the way, are notably partial to mild tobacco, avoid smoking light-colored cigars just as they avoid eating a green orange or an unripe banana.

The prejudice of these natives and of tobacco tradesmen is a logical one, and serves to throw into bold relief a peculiar misconception of facts which is both amusing and embarrassing to venders of the fragrant weed.

Whether cigar smokers will ever awaken to the fact that a dark cigar is, if anything, milder and invariably sweeter and more aromatic than a light cigar, remains to be seen.—*Detroit Free Press*.

AN EXPERIMENT IN SUNDAY CLOSING.

Our much revered friend and co-worker, the late Brother Redsecker, presented a paper along this line before the association some years ago, and prefaced his essay with one of his characteristic aphorisms as follows: "To the avaricious druggist whose sole aim in life is mere money-getting, any remarks which I may make will be like pouring water on a duck's back." Viewed from a moral aspect, this sums up the whole problem in a nutshell. Greed, avarice, and the love for mammon, these are the dominating elements which unfortunately characterize the sole object of many a pharmacist's life.

At this point allow me to present to you a few facts within my own experience for your consideration. Although still a comparatively young man, I have spent upwards of a score of years in a drug store. They have been

years rich in experience and profit, both mental and material, and I am proud and glad indeed that my lot has been cast in such a noble calling. Having labored for many years and being still unable to enlist the interest and co-operation of my brother pharmacists in the Sunday closing scheme, I finally resolved to break away from the old régime and close my own pharmacy at least a portion of each Sabbath Day.

To that end I notified each physician in our city, in a carefully worded letter, of my intentions, giving my reasons for so doing, etc. Much to my surprise they were almost unanimous in their commendation for my action and not a few congratulated me most heartily for taking the initiative. Thus my first and most important step had proven entirely successful. As for my patrons' attitude in the matter, instead of complaints from customers, as was expected, I received many earnest words of encouragement. Some of my best customers openly indorsed my action and the clergy of the city passed a resolution commending me for my worthy and most excellent example. At the beginning some doubt was expressed lest it might seriously impair the success of my business. The result of the Sunday closing was also most gratifying, and after three years' experience with the plan my total sales have increased each year.

My candid opinion of this whole plan of Sunday closing is that to most pharmacists the objections, if any, are largely either imaginary or are actuated by motives of jealousy and selfishness. The real need for open drug stores on Sunday is very little indeed, as you all will agree when you recall the comparative number of sales usually made of drugs and medicines which are absolutely necessary and which could not have been purchased previously. In short, I am convinced this matter of keeping open shop is largely one of habit. And I should be happy indeed if through our grand old Pennsylvania Pharmaceutical Association, which has always stood for the highest and best in our calling, pharmacists could be so inspired with zeal in this new movement for the advancement and uplifting of our profession as to make of them better pharmacists, better men, and respected citizens.—P. HENRY UTECH in the proceedings of the Pennsylvania Pharmaceutical Association.

THE HISTORY OF THE CALABASH PIPE.

If you own a calabash pipe, you have reveled in its light weight, graceful shape, and unusual smoking qualities, and yet you probably do not realize that your owning a calabash is due to the cleverness of an English soldier, and that the article you prize for its rich color and fragrance is an own cousin to the cucumber, the melon, and the squash—a gourd of the family *Lagenaria vulgaris*.

A British soldier, so the story goes, had broken his pet brier, and all that remained of it was the hard rubber mouthpiece. While crossing a field one day he stepped on a calabash gourd, which the South African natives feed when green to cattle, and noticed that the crook of the stem resembled his pipe. Picking the gourd he cleaned out the inside, fitted his mouthpiece to it, and the first calabash pipe was born. The gourd was green and did not burn out, and it did color beautifully; so when the Boer War was over, Tommy Atkins returned to England with his pipe and a number of gourds.

But the dried gourds burned out, and it was necessary to line them. Zinc was first tried and proved unsatisfactory, and then meerschau and the compressed meerschau substitute were employed, as they are to-day.

The calabash gourd can be grown in the United States, but as care must be used in shaping the neck or stem while it is growing it will never be largely cultivated here, as this work can be far more cheaply done in Africa. In fact, the best gourds come from the country along the edge of the Karoo Desert in South Africa, where a temperature of 120° in the shade is not at all unusual. The vines grow in a sandy soil and flourish like the bay tree of the Scriptures, sometimes yielding 50 gourds to a vine, but their cultivation is by no means easy—for pipe purposes—as the surface of the gourd is easily bruised or scratched, and the plant is beset by insect foes and worms.

The gourds when ripe are picked, all the imperfect ones thrown out, and then the stem of the calabash cut off at about the proper length for a pipe. The pulp is carefully removed, and the outside skin scraped off, and then the gourds are boiled and cleaned in huge vats. This cleansing is repeated several times, after which the gourds are placed on large trays and set out in the sun to dry thoroughly. This, too, is an operation that must be con-

ducted with great care, as extremes in temperature crack or distort the bowls and render them unfit for use.

The manufacturers first polish the surface to the rich golden color so prized by smokers, and extreme care must be taken not to scratch the bowls. Then the bowl is mounted, with amber, rubber or composition, depending on the quality of the bowl, and the fitting, either a loose cup bowl or one set flush, is placed in position. The result is a pipe of pleasing lines, of good smoking quality, of extreme lightness, and an ability to color like to that of the meerscham, but without the disadvantages and liability to "burn" of a meerscham. —*Pharmaceutical Era*.

WHAT DRUGGISTS SHOULD NOT TAKE BACK.

The druggist should take back any bottles of once liquid corn cure which has solidified, and any porous plasters which will not stick for the big show.

He should take back gum wrappers and give prizes for them. He should also take the cash at night and put it in the safe. He should take back any unkind words spoken to a traveling man, and things he did not order from the wholesale house.

But he should not take any "back talk" or take back any full bottles of malted milk. He should not take back a single nipple which has been used, much less a pair of outgrown rubber gloves. He should not take back postage stamps with the gum licked off, nor should he take back things he says which are the truth.

He should not take back a derby hat to his next-door haberdasher, unless he can prove that it did not get broken in a fight. He should not take back a quarter, when he can just as well get a half.

He should not take back the rock-candy bottle and come out with a rye face. He should not take back a hot-water bottle unless he has cold feet. He should not take back any sponges, for fear of being soaked.

He should not take back any mirrors, for they cast reflections. He should not take back a safety razor, even though his customer has had a close shave with it. He should not take back any hair tonic, for he might get "bald up."

He should not take back any hoarse remedies, such as throat gargle, zymole trokeys, or

horehound candy, lest he be made to cough up. He should not take back any vaselin or greasy article if he can slip out of it.

He should not take back any dice boxes or playing cards or poker chips, as they are only a gamble. He should not take back any opened bottles of glue, lest he should get "stuck" on it later. He should not take back any stale toilet waters or perfumes, for there is not a "scent" in them.

He should not take back any gauze or cotton bandages unless he is wrapped up in his business.

It has indeed been a pleasure to tell "What a Druggist Should Not Take Back," but here is a customer who wants to bring back a pair of electropodes. She says, "'Pon my 'sole,' they did me no good."—From CHARLES J. SACKSTEDER's paper before the Wisconsin Pharmaceutical Association.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

WINDOW DISPLAYS AT SPECIAL TIMES.

To the Editors:

The articles and illustrations on window trimming in the BULLETIN have interested us. Having gleaned some very good ideas from



The Red Cross Drug Store, Bartlesville, Oklahoma, W. B. Campbell, proprietor.

them, we would like to express our own views on the subject.

We arrange our windows to conform with our newspaper advertising, trying for the

most part to feature one line of goods at a time, so as to impress the fact that we carry quantity as well as quality.

Changing the trims every week regularly is another custom of ours which we adhere to strictly. Special trims now and then, also holiday exhibits, are of great value in that they create a curiosity, which attracts the attention of the public to the goods displayed. Of the two window trims we offer for inspec-



A Thanksgiving window in the Red Cross Drug Store.

tion, the Thanksgiving display was the easiest to put in. It was given unsolicited newspaper comment, and we received many compliments on the idea, incidentally selling a good deal of box candy.

OUR CHRISTMAS DISPLAY.

The Christmas trim which occupied the window is another original idea of ours, displaying our specialties in Christmas presents. The



A Christmas window display in Mr. Campbell's store.

background in each case is hand-painted in oil color, on canvas, the work of our trimmer.

The fixtures used are of great advantage, bringing the goods up from the floor of the window into plain view of the passer-by. The stands do away with the necessity of building

up a surface with boxes to answer the purpose, and much more space can be covered with better results.

When the week has elapsed the goods in the window are displayed inside the store, where the shopper is again reminded of them. The picture of the store will show the space we have to carry out this plan, though, were the room smaller, we would manage in some way, for the system works wonders.

THE SHOW-CARDS.

Show-cards are needed in a window just as much as your name, and the name of your business, is necessary on the front of your store. We never start to change a window before deciding on the nature of the new display. After that is settled the cards are written.

The wording on all of our cards is as concise and pointed as is possible to convey the meaning intended. Often we use slang phrases, bright sayings referring to the goods on display. Many of these expressions being funny are taken up by our customers and repeated to our benefit. For such publicity is free. The use of the cards is by no means over at the end of the week as in the case of the goods. They do good, steady work as silent salesmen distributed throughout the store.

EDWARD TOWN,

Window trimmer in Campbell's Red Cross Drug Store.
Bartlesville, Okla.

AN AMERICAN PHARMACIST WATCHING THE REVOLUTION IN CHINA.

To the Editors:

I am sending you some pamphlets in Chinese on disinfection. These articles deal especially with prevention of plague, and while partly sent out as an advertisement they deal largely with sanitary matters. This all goes to show the interest taken in these things among the Chinese. China is awakening to modern ideas, and rapid progress may be expected during the next twenty-five years. The present revolution reveals the dissatisfaction of the people with conditions as they now exist, and no matter how the revolution eventuates, the result will be a more modern China. As I write I can hear the boom of guns, and by looking out of the port I can see the flash of the rival batteries on opposite sides of the Yangtse River at Hankow exchanging compli-

ments. The revolution has spread throughout the entire valley. The rebels hold everything for a stretch of over 1000 miles with the exception of Nanking, 200 miles up the river. This port may have fallen by this time.

J. F. RUPERT, U. S. Navy.

U. S. S. Helena, Asiatic Station.

HE OBJECTS TO SOME OF THE N. F. FORMULAS.

To the Editors:

I notice in your article in the December number, "Comment on the New N. F. Formulas," that the N. F. Committee asks for criticisms. My criticism on the formulas published in your journal is that we have far too many formulas for vehicles now, without complicating matters and still further loading druggists' shelves. Elixir Aromatic, U. S. P., and Elixir Lactated Pepsin are both so widely used as vehicles that with the others which we already have in the National Formulary I think we have plenty. If a physician wants something special, let him order it. We don't need any more.

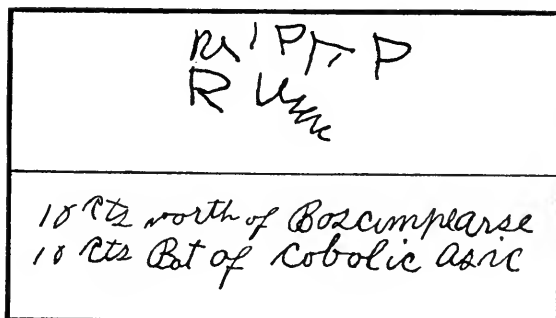
WALTER F. MEYER.

Colorado City, Colo.

A PRIZE WINNER!

To the Editors:

I am enclosing two orders which I received recently and which I hope you will find worthy of reproduction in the BULLETIN. One is easily deciphered, while the other is a regular Chinese puzzle, pure and simple. Fortunately, there happened to be a telephone



close to the customer who sent the latter in, and I found out by inquiry that blue ointment was desired! Now if any one can contribute a more difficult specimen than this, the treats are on me!

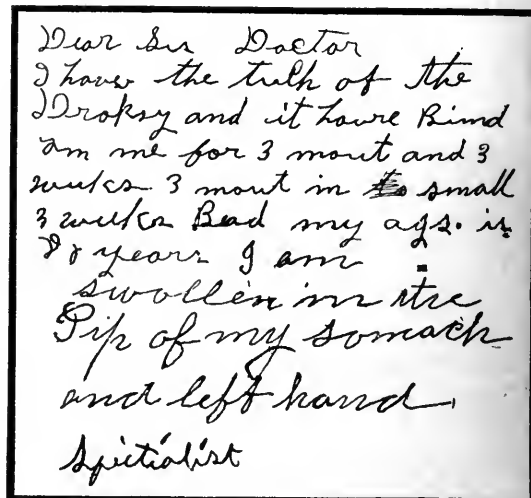
G. S. STOVALL.

Lake, Miss.

SOMEWHAT SWOLLEN UP.

To the Editors:

We have just received a unique request from a customer. Thinking it might be of some interest to other readers of the BULLETIN I am submitting it for publication if you have



the space to spare. I may add that I am always overanxious for the BULLETIN to come each month. I can't get along without it!

Corinth, Miss. H. E. WALKER DRUG CO.

THE DIFFERENCE.

To the Editors:

The thought may be old, and again it may be new to you, regarding the wide difference in the effect of medicine due to its method of administration — whether applied internally, hypodermically, or otherwise. Give a dog 30 drops of turpentine and he'll pass a ten-yard tapeworm. Give him the same thing as an enema and he'll pull a six-cylinder motor at the speed limit!

W. BODEMANN.

Chicago.

A WISE NEW YEAR'S RESOLVE!

To the Editors:

I am going to start the New Year right by making an investment in the best drug magazine published! You can put me down as a warm friend of the BULLETIN.

Laurel, Miss.

R. H. SCRUGGS.

To the Editors:

The BULLETIN OF PHARMACY is my refrigerator in summer and my hot-water bag in winter.

E. JENSEN.

England.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Bid for Business.—

J. S. Gleghorn, of Waynesburg, Pa., distributes a store paper. The make-up and style resemble that of

WHEN WE STARTED

When we started the Quality Drug Store a little over a year ago, people were in the habit of buying their drug-store goods some other place. Now they are in the habit of buying them here. We make it profitable for them to do so; we have convinced them that there is an all-round saving at

THE QUALITY DRUG STORE

We save you more by making our terms net cash. When you buy on time you really borrow money—the merchants' money—and he charges you interest on it. That interest charge is figured in with the price and you don't see it. But it is there all the same—and YOU PAY IT. WE SAVE YOU THAT. And as we have no bad bills you don't have to donate anything to offset those. Why not let us help you to these substantial savings? We are ever on the alert; we aim to keep up the high standard of our store in every respect. We have every facility and advantage for making this store the place to buy everything in the drug line. Ours is a modern pharmacy, with modern methods of doing business. Phone us and we'll deliver any purchase. Send the children, we treat them exactly as we would you.

Gleghorn's Quality Drug Store, "The Nyal Store"

111 West High Street,
Waynesburg, Pa.

the *Saturday Evening Post*. On the back cover Mr. Gleghorn runs an ad. in which he advances reasons why the reader should patronize his store.

Advertising in Theater Programmes.—

Messrs. Wilkinson & Co. of Keokuk, Ia., had an ad. in the theater programme of the Grand Opera House of that city. It was of a character intended to appeal to the people who attend the theater, and will be found

Bright Eyes, Rosy Cheeks, Pearly Teeth, Peachy Skin, Attractive Manicured Hands are dependent upon correct toilet accessories. Our stock of these articles is so large and so varied that you will find here just the right thing for your particular needs. Order by phone and we shall send an assortment for your selection. We deliver anything, anywhere, any time.

WILKINSON & CO.

Keokuk's Biggest, Busiest, and Best Drug Store,
422 Main Street

suggestive to other druggists who employ this medium of advertising. The caption, it will be noticed, is a play on the name of the show, as the performance was known as "Bright Eyes," a musical production.

Another Full-page Ad.—

The State of Illinois seems to be conspicuous for the number of druggists who run full-page newspaper ads. In an edition of the *Illinois State Register* now before us appear two such large insertions. Both are from

The collage consists of several distinct advertisements:

- Claypool's Drug Store:** A large header at the top with the store's name and address: "SOUTH PHARMACY, 975 S. CENTRAL ST., CHICAGO, ILL." Below this is a section titled "Claypool's Prescription Pointers" with a small illustration of a person.
- Coughing At Night:** An advertisement for "Foley's Honey and Tar Compound" with a small illustration of a person coughing.
- Small Cuts of Remembrance:** An advertisement for "The Valentine" with a small illustration of a heart.
- TAKE FOLEY KIDNEY PILLS:** An advertisement for kidney pills with a small illustration of a person.
- ST. JACOB'S OIL:** An advertisement for St. Jacob's Oil with a small illustration of a person.
- Fountain Pens for Christmas:** An advertisement for fountain pens with a small illustration of a pen.
- Please the Whole Family:** An advertisement for "Beautiful Gold Fish for Christmas Gifts" with a small illustration of a fish.

pharmacists, one inserted by Claypool's Drug Store, the other by Mitchell's.

The Claypool ad, seen in the illustration shows the general character of the large ads. They are well arranged, being divided into sections, each one of which is surrounded by a line border.

Canvassing the Market Place.—

Clarke F. Hess of Norristown, Pa., is not letting any business get away from him if he can help it. Not long ago he distributed a little folder among the farmers and merchants who have stalls in the market place. Here are the two inside pages:

Doing Business the New Way

Instead of sitting back and waiting for you to come to me. I am coming to you

I Want to Do Business With You

Every Tuesday, Thursday and Saturday morning I will pass through the Market to solicit your trade. All orders taken are delivered.

OUR SERVICE IS RIGHT

We carry at all times a Complete Stock of

Drugs and Chemicals
Patent Medicines
Tooth Brushes
Hair Brushes
Combs
Sponges
Chamois
Hot Water Bottles
Syringes of all kinds
Stock Food and
Poultry Paucers
The Nyal Remedies
A. D. S. Preparations
Toilet Preparations
Perfumes and Soaps

OUR PRICES ARE RIGHT

The paper was a thin chocolate-colored stock, the type a darker shade of the same color.

Mr. Hess says that by canvassing the market he secured some good business. Others might try the scheme.

PRACTICAL PHARMACY

Some Proposed N. F. Formulas.—

Here are some more of the formulas proposed for introduction into the next edition of the National Formulary:

MISTURA FERRI SALICYLATA.

(Salicylated Mixture of Iron. Cohen's Salicylated Iron Mixture.)

Sodium salicylate	125. Gm.
Tincture of ferric chloride.....	125. Cc.
Ammonium carbonate	6.5 Gm.
Citric acid	14. Gm.
Oil of betula	4. Cc.
Glycerin	175. Cc.
Distilled water, a sufficient quantity to make	1000. Cc.

Dissolve the citric acid in 200 Cc. distilled water, add the ammonium carbonate, and then dissolve the sodium salicylate in this solution, add the tincture of ferric chloride, glycerin, and the oil of betula, mix, and then add sufficient distilled water to make 1000 Cc. and filter.

GARGARISMA GUAIACI COMPOSITA.

(Compound Gargle of Guaiac. Cohen's Guaiac Gargle.)

Ammoniated tincture of guaiac.....	100. Cc.
Compound tincture of cinchona.....	100. Cc.
Clarified honey	200. Cc.
Potassium chlorate	40. Gm.
Oil of peppermint.....	2. Cc.
Distilled water, a sufficient quantity to make	1000. Cc.

Place the clarified honey in a bottle graduated to 1000 Cc., then gradually add the mixture of the oil of peppermint and the tinctures, shaking after each addition. Then add in divided portions with continuous shaking the solution of the potassium chlorate in 500 Cc. of warm distilled water; then add sufficient distilled water to make the mixture measure 1000 Cc.

NEBULA MENTHOLIS.

(Menthol Spray.)

Menthol	2 Gm.
Liquid petrolatum, a sufficient quantity to make	100 Cc.

Dissolve the menthol in the liquid petrolatum by agitation in a stoppered bottle.

NEBULA MENTHOLIS COMPOSITA.

(Compound Menthol Spray.)

Menthol	1. Gm.
Camphor	1. Gm.
Oil of betula.....	.5 Cc.
Eucalyptol .....	.2 Cc.
Oil of cinnamon.....	.2 Cc.
Liquid petrolatum, a sufficient quantity to make	100. Cc.

Agitate the ingredients in a stoppered bottle until solution is obtained, then filter if necessary.

PASTA RESORCINOLIS FORTIOR, LASSAR.

(Lassar's Stronger Resorcin Paste.)

Resorcinol	20 Gm.
Zinc oxide	20 Gm.
Starch	20 Gm.
Liquid petrolatum	40 Gm.

Thoroughly triturate the zinc oxide with sufficient of the liquid petrolatum to make a thin, smooth paste. Reduce the resorcin to a very fine powder, mix it with the starch, and add the mixture to the zinc oxide paste and triturate till a uniform smooth mixture is obtained, gradually adding the remainder of the liquid petrolatum and thoroughly incorporating the mixture.

The Effect of Heat on Basham's Mixture.—

F. W. Nitardy of Denver, Colorado, does not believe in attributing trouble with Basham's mixture to the quality of the materials used. Writing in *N. A. R. D. Notes*, he says the temperature may be the cause of the difficulty.

Mr. Nitardy says he has never noticed any mention of the temperature at which this preparation has been kept when it was found to be "off," in spite of the fact that ordinary warm summer weather is sufficient to precipitate the best and most carefully prepared sample.

Ferric acetate is unstable at temperatures that approach summer heat, but that fact is not generally known.

If one will take a sample of strictly U. S. P. Basham's mixture, divide it into two portions, keep one in a fairly warm place and the other on ice, he will find that the former portion will precipitate in from one to three days, while the portion on ice will be in perfect condition in six months.

Mr. Nitardy has tried it. He did that two years ago and since has not experienced any trouble with the preparation. He used about two gallons a week, which ought to be a fair test.

Mr. Nitardy believed that if druggists generally would bear this in mind it would save them much trouble and money in the course of their business.

BOOKS

HOW TO MAKE SHOW-CARDS.

We have just perused a new book entitled "How to Make Show Cards," and are very favorably impressed with it. It is a practical treatise on the fundamental principles of letter-making with pen and brush. Any pharmacist will find this work useful. The author is Charles A. Miller, Associate Editor of *The Spatula*. Mr. Miller aims to be practical. He has written the book primarily for the clerk or proprietor in active business. He gives concisely the essential principles of sign letter-making, and demonstrates how easily a person of ordinary ability may acquire a facility in making attractive card signs for counters and show windows. The subject is so well covered that any one who conscientiously follows the text will make progress in the work. The book is printed on heavy coated stock, is illustrated, and is bound in paper. A number of sample alphabets and signs are included, and in the last chapter are some "catch phrases" that may be used as legends on window cards. The price is \$1.00 post-paid. The publishers are The Spatula Publishing Co., of Boston, Mass.

MERCK'S ANNUAL REPORT.

A most informing book on recent advances in pharmaceutical chemistry and therapeutics is E. Merck's Annual Report. We have just had the pleasure of reading the last issue. The bulk of the volume is devoted as usual to abstracts from the world's medical literature. Among other things, reference is made to the most important publications on the Ehrlich-Hata preparation, Salvarsan, the subject of so many papers during the year.

The introductory chapter treats of "The Cacodylates and Their Therapeutic Uses." It represents a compilation of what the clinicians and research workers have had to say on this important subject. Then follows an article on "Kefir," a ferment used by the Caucasians in the making of kumiss, a preparation which was shrouded in mystery for a long time. And so the book

continues dealing not only with medicines of recent origin but setting forth also the newly discovered properties of old medicaments.

A GUIDE IN PLANT CHEMISTRY.

The School of Pharmacy of the University of Wisconsin has published a brochure entitled "Plant Chemistry for Pharmacy Students." It is not a text-book or laboratory manual, but is a guide intended for both instructors and students. It outlines the work in a manner which will make it of interest to others taking up this branch of study, and we are authorized to say that a few copies are available at the cost price of 35 cents each. They may be had upon application to the Secretary of the Board of Regents, University of Wisconsin, Madison, Wisconsin.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Idle Items.—

Non-crystalline boron is produced which is almost as hard as diamond, and is used for bearings, pivots, etc.

Most soaps will sink in water, but Dr. Cornish has shown that practically all soap solutions are lighter than water.

Lime is soluble to the extent of 6.07 per cent of calcium hydroxide in a 20-per-cent sugar solution, and to 1.34 per cent in a 35-per-cent solution of glycerin.

Norway has \$15,000,000 invested in the manufacture of air-nitrates. In the United States but one factory is in operation, at Niagara Falls, but another is being built in Tennessee.

Sea-water contains about 2 per cent of chlorine, which cannot be accounted for by dissolved substances from the land. It is thought that volcanoes account best for it.

Ultraviolet light rays greatly reduce the power of the digestive and other ferments. Sunlight has, therefore, a distinctive action on solutions of these ferments.

Six turns of an aluminum coil in a condenser are said to be equal in cooling power to ten turns of a glass coil of equal diameter.

A crystalline deposit in a sample of fluidextract of cinchona was, in one case, found to consist almost entirely of calcium quinate.

Cardamom oil is poisonous! But not the volatile oil from *Elettaria repens*, but a fixed oil from the seeds of *Hydnocarpus* or *Maratti*. The latter has been used in oleomargarine under the name of cardamom oil, and has produced unpleasant results.

Selenium cells are being used for burglar and fire alarms. Light from a lantern or fire striking the cell closes a circuit and rings an alarm.

Platinum is quoted at about twice the price of gold. The demand is increasing and the supply is decreasing.

A French chemist says that saturated solution of boric acid affects the digestive power of trypsin or

pepsin but slightly, and that a weak solution increased their power.

A Russian chemist says that nicotine is the most injurious to spermatozoa of all the alkaloids and toxins. Is the cigar responsible for "race suicide"?

A French chemist propounds the theory that the particles of comets' tails give out emanations which cause changes in atmospheric conditions, and he supports the theory strongly.

O. Piloty has proved that the iron in blood is all in the ferric condition, and is a ferric compound of hematorporphyrin.

After the injection of salvarsan ("606") arsenic is found in the urine for about three weeks, and it remains in the organs for months.

Cocoanut oil is being used in Europe to adulterate milk, skim milk being used to emulsify it and the fat-content brought up thereby.

Tomato oil is a new economic product. Instead of throwing away the seeds, which contain 18 to 20 per cent of oil, the canners are beginning to extract the oil. It is a drying oil, and may be employed in paints.

Books are disinfected satisfactorily by immersing in a 2-per-cent solution of phenol in gasoline for twenty minutes, then dried. The books are not injured by this treatment.

Artificial horsehair is now made by digesting cocoanut fiber in 15-per-cent sodium hydroxide at a temperature of 110° C., then washing. The fiber not softened by the hot alkali makes a good substitute for horsehair. (Oh, you automobile!)

When a body becomes luminous, not every particle emits light, but only some abnormal molecules. These molecules are supposed to consist of distinct varieties of matter. So says Prof. J. J. Thomson.

Calomel is acted upon by antipyrin to form mercury, mercurous oxide, and corrosive sublimate, and antipyrin hydrochloride. Such a combination is likely to produce salivation or even poisoning.

An Australian physician states most emphatically that pepsin in combination with alkalies is certainly active in the stomach, whatever it may be in the test-tube. He believes thoroughly in giving alkalies with pepsin from clinical results.

Dr. H. C. Bastian insists that living matter may come into existence spontaneously. He heated mixtures of sodium silicate and ferric nitrate in sealed tubes to 125° C. for five to ten minutes, at which temperature germs are destroyed, and then found living bacteria, yeasts, and molds were slowly formed in the solutions.

Another Blade of Grass.—

Eucalyptus oils containing phellandrene have been tabooed by the Pharmacopœia, but the copper miners have discovered that such oils will extract copper very economically, and the demand for them has suddenly increased. Four pounds of oil is used per ton of ore; the copper is collected by the phellandrene and floats on the surface. The oil can be recovered by distillation.

In Anemia.—

Dr. Wiggers finds that drugs which act on the heart do not have the same action in anemic conditions

that they do in normal conditions. Thus anemia prevents the slowing action of adrenalin, and also of digitalis, ergot loses its pressure-raising action, morphine is more likely to be fatal, and nitroglycerin does not increase the heart action as well.

In Glass, Too?—

H. Cohn thinks that hydrofluoric acid is thus far the best preservative of fruit juices. Alcohol cannot be boiled out successfully, hydrogen peroxide affects the taste and aroma, and salicylic and benzoic acids are prohibited. Hydrofluoric acid preserves the juice, and can be entirely removed from it, before use, by precipitation with calcium carbonate.

Told You So!—

Old-fashioned "superstitious" folks used to find water in a new country by means of the divining-rod, which pointed downward spontaneously when water was to be found. The new-fashioned "scientific" seeker may use a "phonendoscope," which detects the sound of running water so delicately that a stream 400 feet below the surface has been located by it.

Corking Chemistry.—

M. V. Schmidt says that cork is an insoluble mixture of anhydrides and esters of aliphatic acids, chief of which are suberic and phellonic acids. By impregnating sawdust or filter-paper with a mixture of the crude acids and heating to 140° C., an artificial cork is produced which has all the properties of natural cork except its physical structure.

Water Change!—

If the fat-splitting enzyme of castor seeds be mixed with oil and water in the proportion of 6 parts of enzyme to 100 of oil and 40 of water, the oil is almost entirely split up into glycerin and fatty acid. But if glycerin, fatty acid, and enzyme be mixed without water, a neutral oil is produced, the enzyme acting in just the reverse way.

High-drogen.—

The dirigible balloon has developed some ingenious schemes for producing cheap and convenient hydrogen gas. A French inventor finds that metallic calcium can combine with hydrogen to form calcium hydride, and this decomposes in water, yielding hydrogen gas and calcium hydroxide. This is proposed as a portable form of hydrogen.

Spirit of Nitrous Ether.—

Since spirit of nitrous ether cannot be made to hold its strength, D. B. Dott recommends that an alcoholic solution of lactic acid be mixed with a solution of sodium nitrite in molecular proportions, thus forming spirit of nitrous ether extemporaneously. The lactic and nitrite solutions are permanent.

Ferments Meant for What?—

How do enzymes act? Some say as catalysts, but Professor MacLeod points out that enzymes cause, not merely accelerate, certain definite reactions, and that when inoculated into animals they cause certain anti-ferments to appear in the blood. He thinks that enzymes are more than catalysts.

Bleachers for the Washerwomen.—

Sodium perborate as an ingredient of laundry soaps is increasing in use. On treatment with hot water it is decomposed into hydrogen peroxide, which acts as a bleaching agent, sodium hydroxide, and borax, which act as detergents. Several such soaps are in the market under special proprietary names.

Digitalis Preparations.—

Dr. Worth Hale says that the greater the proportion of alcohol in preparations of digitalis, the less is the deterioration by age. He found some fluidextracts and tinctures that maintained a high degree of potency for eight years. A fluidglycerate was less than half as strong as a fluidextract.

Hair-again?—Not Me!—

Thallium acetate is stated to produce baldness without fail when taken internally. Now if somebody can produce a physiological antidote to thallium it's hair-rah and a fortune for him.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Reciprocity Between Boards of Pharmacy.

S. C. R.—The boards of pharmacy of the following States accept one another's certificates under certain restrictions: Alabama, Arkansas, Arizona, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, West Virginia, Wisconsin, Kansas.

The general rule is that each candidate must secure from the board which registered him a national blank, properly filled out by the board, and showing him to have taken the required examination and passed with an average rating of not less than 75 per cent, and not less than 60 per cent in any one branch. This blank or certificate he must then present to the board in that State where he now desires registration on the exchange plan. In addition to this general requirement, however, many of the boards have special requirements of their own. Thus in some States a certain amount of preliminary general education is demanded. In this State, for instance, the pharmacy act compels two years of high-school work or their equivalent. In some States, too, recommendations from reputable citizens, and the like, are required.

Furthermore, no State board in the list given above

is compelled to accept the certificate of another board in any particular instance. The whole scheme is voluntary—not compulsory. Each reciprocating board is free to settle every individual case upon its own merits, and some boards require an applicant to appear before them in person. The fee for registration on the exchange basis varies in different States from \$5.00 to \$25.00.

The best thing for you to do is to write the secretary of the board of that particular State where you desire registration. He will tell you just what the conditions are, and under just what terms, if any, the board will accept your certificate in lieu of an examination. A full list of the secretaries of the different boards of pharmacy throughout the country was printed on page 306 of the BULLETIN for July, 1911.

Preserving Rubber Against Cracking.

W. B. D. writes: "A man in charge of a mine rescue-car here wants an application of some kind for rubber, to prevent it from drying and cracking. The rubber is used on the oxygen helmets, and it is important that no leaks arise from cracking."

For undeteriorated rubber 3-per-cent solution of phenol is the best. For deteriorated rubber, a 1-per-cent solution of potassium pentasulphide has been recommended, the restorative properties of the latter depending on the absorption of the sulphur from the pentasulphide.

Tubing can be kept for years in a 3-per-cent solution of phenol. It is necessary, of course, to use a suitable vessel, one in which the tubing lies in an easy coil.

We read in the literature that it is of the greatest advantage for all rubber goods, if seldom used, to wash them occasionally with water to prevent them from becoming too dry. Tubing which still possesses elasticity should be kept in vessels containing a dish of common petroleum. Keeping in wooden boxes is objectionable, while keeping in air-tight vessels alone is sufficient to preserve rubber for a long time. Exposure to light should be avoided.

Other methods of preserving rubber that might be tried experimentally first on a little tubing are as follows:

Steep the rubber materials in a bath of melted paraffin for a few seconds or several minutes, in accordance with the size of the article. Then dry in a room heated to about 212° F. Another method is to dip the tubing a few minutes in pharmacopoeial ammonia water 2 ounces, water 6 ounces. Or immerse even longer, a half-hour or more, in this mixture until the hardened tubing resumes its former elasticity, smoothness and softness. The immersion should cover inner and outer surfaces. Warm water works better.

The use of 3-per-cent phenol solution is probably best, but a little trial will tell.

Making Percentage Solution of Ammonia.

B. F. G. writes: "Please publish a formula for making an aqueous solution of ammonia containing 10 per cent by weight, using the stronger ammonia water

U. S. P., which contains 28 per cent by weight. How much 28-per-cent ammonia would it take by measure to make one pint of a 10-per-cent solution?"

By way of answer, we cite the following specific example appearing in Remington's Practice of Pharmacy, page 102: How much water must be added to 2 pounds of stronger ammonia water (28 per cent) to reduce it to ammonia water (10 per cent)? The answer is:

$$\begin{array}{r} 10 \\ 28 \quad 0 \\ \hline 10 \quad 18 \end{array} \quad 10 : 18 :: 32 : 57.6 \text{ ounces of water.}$$

To make one pint of ten-per-cent ammonia water from 28-per-cent ammonia: 1 pint=473.197 Cc. 473.197 × 0.958 (sp. gr. of ammonia water)=453.322 grammes. This equals 45.3322 grammes of absolute ammonia or (45.33 ÷ 0.28)=161.89 grammes of 28-per-cent ammonia. Or one might solve the problem by proportion —28 : 10 : : 453.322 : X, X=161.89 grammes of 28-per-cent ammonia.

Walnut Hair Dye.

N. Z. S.—We do not know the formulas of the proprietary hair dyes which you mention.

Many of the so-called walnut dyes, however, are not made from walnut shells at all, but are of chemical composition, the following being an example:

Silver nitrate	45 grains.
Pyrogalllic acid	3 drachms.
Distilled water	2 fluidounces.
Glycerin	6 fluidounces.

WALNUT HAIR OIL AND DYE.

Oils impregnated with the coloring principles of walnut shells have been recommended for dyeing the hair, thus serving as a combined oil and dye. The oil is to be applied daily, the hair acquiring a dark-brown tint. The following are said to be the best formulas:

- (1) Paraffin oil16 fluidounces.
Alum, powder4 drachms.
Walnut shells, dried.....4 ounces av.
Alcoholsufficient.
Perfumeto suit.

Moisten the shells with alcohol, add the alum and paraffin oil, heat on a sand-bath for an hour, then filter, and finally add any desired essential oils or synthetic perfumes.

- (2) Walnut shells, green or fresh.....3 ounces av.
Alum, powder3 drachms.
Olive oil16 fluidounces.
Oil of rose.....15 drops.
Oil of bergamot.....25 drops.

Beat the walnut shells in a mortar with the alum, then heat with the olive oil until all moisture has dissipated, filter, allow to cool, and add the aromatic oils.

Toothache Wax or Gum.

D. S. H.—Toothache "wax" or "gum" is a favorite form of toothache remedy. It consists of a waxy substance, usually yellow or white beeswax, which is sometimes colored red by keeping in a melted condition with alkanet root and then straining off the excess of root. This is mixed with anodyne substances like opium, oil of clove, chloral hydrate, etc., and then rolled into pencils, cut into appropriate lengths, wrapped in thin waxed paper, and preserved in small vials of

one- or two-drachm sizes. Or a better way is to immerse cotton in the fatty mixture, then cut and wrap the mass as before. In using, cut or pinch off a piece of the pencil, warm it gently by rolling between the fingers, and insert it into the cavity of the tooth, having previously dried the latter with a pledget of cotton.

- (1) Venice turpentine $\frac{1}{2}$ ounce av.
 Paraffin oil 4 fluidrachms.
 Salol $\frac{3}{4}$ ounce av.
 Yellow wax $3\frac{1}{4}$ ounces av.
 Alkanet root, sufficient to color.

Triturate together the salol, turpentine, and oil, then add to the wax, previously colored with the alkanet by melting, allow the mixture to cool, and roll into sticks or pencils.

- (2) Paraffin 3 ounces av.
 Burgundy pitch 3 ounces av.
 Oil of clove 1 ounce av.
 Carbolic acid 1 ounce av.

Melt the paraffin and pitch together and add the other ingredients when nearly cold, mix with cotton and cut into short rods. Wrap in thin waxed paper, and keep in small bottles.

PELLETS.

These are similar in composition to the "wax." The mass is divided into small pills, one of which is to be inserted into the cavity of the tooth to relieve pain.

- (1) Opium, powder 2 drachms.
 Pellitory root, powder 1 drachm.
 Creosote, enough to form a mass.

Make into pellets weighing about one-half grain each.

- (2) Oil of clove 40 drops.
 Oil of cajuput 40 drops.
 Sweet almond oil 90 drops.
 Opium, powder 3 drachms.
 Belladonna root, powder 3 drachms.
 Pellitory root, powder 3 drachms.
 Yellow wax 4 drachms.

Melt the wax, incorporate the almond oil, beat in the powders and then the other oils, divide into pills weighing about one-half grain, sprinkle these with powdered clove, and keep them in bottles or well-closed boxes.

A Difficult Mixture.

A. B. G. has been having trouble with the following prescription:

- Spirit of nitrous ether 26 Cc.
 Balsam of copaiba 38 Cc.
 Benzoic acid 16 grammes.
 Potassium citrate 16 grammes.
 Potassium acetate 16 grammes.
 Potassium iodide 12 grammes.
 Elixir buchu and hyoscyamus compound,
 enough to make 120 Cc.

Mix. Signa: 6 Cc. every three hours in water.

He adds that he has tried to compound this mixture three or four times, but the preparation in each instance was not fit to be seen, much less to be taken.

The benzoic acid in this prescription is insoluble. There is not enough alcohol in the mixture to complete solution, thus causing the thick, unsightly mass. If we omit the benzoic acid the prescription gives a good appearance. It should be dispensed with a shake label.

Disguising the Odor of Camphor; Aspirin Tests.

H. H. asks what will take away the odor of camphor in a liquid or powder form. He also wants a test for aspirin.

You can't remove the odor of camphor. The most one can do is to disguise it with oils of lavender, bergamot, or rosemary, using one or all of them. If the camphor is not too strong, the odor can be masked, but

if there is much camphor present, the oils will merely modify the odor.

As for tests for aspirin, the following data will be serviceable: It forms small, colorless, crystalline needles, melting at 135° C. (275° F.), odorless and of acidulous taste. To take the melting point is therefore one test. Secondly, aspirin forms clear, colorless solutions which do not develop a violet color on the addition of ferric chloride unless previously hydrolyzed by boiling with sodium hydroxide. It gives no reaction with silver nitrate and should leave no residue when heated on a platinum foil. Further information may be had from the manufacturers, Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany (Continental Color and Chemical Co., New York).

Antimonial Powder.

D. M. J. has received the following prescription:

- Digitalis 4 grains.
 White antimonial powder 6 grains.
 Nitre 30 grains.

Misce et fiat 1 powder.

He wants to know what white antimonial powder is.

This is a veterinary prescription probably calling for the grayish-white oxide of antimony, Sb₂O₃. In the Pharmacopœia of 1890 appeared antimonial powder (James's Powder), consisting of antimony oxide 33 grammes, and precipitated calcium phosphate 67 grammes, mixed. But that mixture is hardly intended here.

Ointment of Resorcin Compound.

P. D. E.—We do not know the composition of the proprietary preparation which you mention. If you have in mind something on the order of compound resorcin ointment, you will find a formula on page 191 of the National Formulary. It reads:

- Resorcinol (U. S. P.) 6 parts.
 Zinc oxide 6 parts.
 Bismuth subnitrate 6 parts.
 Oil of cade 12 parts.
 Paraffin 10 parts.
 Petrolatum 25 parts.
 Hydrous wool-fat 35 parts.

Triturate the resorcinol, zinc oxide, and bismuth subnitrate with a small quantity of the hydrous wool-fat, until a perfectly smooth mixture is obtained. Incorporate this with the remainder of the wool-fat, add the paraffin and petrolatum, previously melted together, and lastly the oil of cade. Mix intimately, and preserve the ointment in containers protected from the light.

Violet Ammonia.

J. L. wants a formula for violet ammonia. The following recipe is said to be excellent:

- Ammonia water, 10 per cent. 250 Cc.
 Green soap 120 grammes.
 Oleic acid 10 Cc.
 Oil of bay 1 Cc.
 Oil of rosemary 1 Cc.
 Oil of verben 5 Cc.
 Water, enough to make 1000 Cc.

Dissolve the soap in 500 Cc. of warm water and when cool add the water of ammonia and the oils; mix by agitation, and add lastly the oleic acid and enough water to make 1000 Cc.

E. R. B. wants a formula of a preparation for marking or lettering slides for moving picture machines. Can any one help him out?

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THE MONTH'S HISTORY

THE NEW MANUFACTURERS' ASSOCIATION.

And now the manufacturers have formed an organization—the manufacturers of pharmaceuticals, chemicals, biologicals and surgical dressings. This is the last branch of the drug trade to have an association of its own. The retailers have had their American Pharmaceutical Association and their National Association of Retail Druggists. The jobbers have had their National Wholesale Druggists' Association. The patent-medicine proprietors have had their Proprietary Association of America. The manufacturers, however, have until now had no representation, except such as they could get by being associate and therefore indirect members of the jobbers' organization.

The new "National Association of Manufacturers of Medicinal Products" was formed

last month in New York, and the following officers were chosen: President, Frank G. Ryan, of Parke, Davis & Co.; vice-president, Adolph Rosengarten, of the Powers-Weightman-Rosengarten Company; secretary, Charles M. Woodruff, of Parke, Davis & Co.; treasurer, Henry C. Lovis, of Seabury & Johnson; members of the Executive Committee, A. R. L. Dohme, of Sharp & Dohme, and C. J. Lynn, of Eli Lilly & Co.

The purposes of the new organization are simply what the purposes of all such bodies in the drug trade have been—to conserve, protect and advance the interests of that particular branch of the trade represented by the association. In the first place, the manufacturers need to get together and take definite action on a considerable number of things affecting themselves only—such as the labeling of products, the adjustment of differences, the prevention of fraudulent practices, and the like. In these days of legislative ferment, too, the manufacturing branch of the trade will now have a chance to be heard with one voice in Washington and elsewhere. Under the latter head it may be said that after discussing a number of congressional bills at the meeting last month the organization decided to send in a protest against the Richardson bill in its present form. As for anti-narcotic legislation, it was made clear that the manufacturers were in favor of all wise and proper restrictions, but would oppose burdensome details which promised nothing definite in the way of relief.

* * *

WASHINGTON AFFAIRS.

Reference in the foregoing article to the Richardson bill reminds us that practically all branches of the drug trade are against this measure. Its provisions were described briefly in this department of the BULLETIN last month, and its primary purpose is to so amend the Federal food and drugs act as to bring false and exaggerated remedial claims within the application of the law. No one seems to object

to this fundamental object, but the Richardson bill goes farther and provides for a lot of unnecessary things. The patent-medicine interests, indeed, are afraid it would even wipe out the whole industry. The N. A. R. D. is against the bill in its present form, but will seek to have it so modified that the good in it will be retained and the bad rejected.

Several other bills proposing to amend the food and drugs act are pending in Congress, and the report now is that a general hearing on all of them will be granted some time within the next few weeks. Something like order will probably be wrought out of all this chaos. In the meantime the tentative ruling regarding narcotics has not been adopted by the Department of Agriculture, and may not be. Secretary Wilson has announced that the new method of issuing tentative rulings in advance will be abandoned anyway, and this is supposed to be an offense to Dr. Wiley inasmuch as it was Wiley who stood sponsor for the proposed narcotic ruling. Rumors have been current in Washington during the last month that in view of this and other conditions Dr. Wiley might resign, but we ourselves don't take any stock in such conjectures.

In the meantime the Congressional Committee has promulgated its report on the Wiley-Rusby situation, as readers of the newspapers know. The committee practically exonerated Dr. Wiley from anything but technical blame, although most of the other issues raised in the congressional investigation were dodged adroitly. About the only definite opinion expressed was one holding the Remsen Referee Board to be operating without proper authority of law. It seems to be the general notion, however, that Secretary Wilson will not listen to any proposition to have the Remsen Board abandoned.

* * *

THE INTERSTATE LIQUOR BILL.

While on the subject of national legislation we may report that the N. W. D. A. seems quite worried over a bill in the House, the purpose of which is to prevent the interstate shipment of liquors into prohibition territory. It has been found during the last few years that the State anti-narcotic laws on the one hand, and the State local-option or prohibition liquor laws on the other, have been largely nullified by the freedom with which

shipments could be received across the border from another State. The only possible method of stopping this leak is by means of national legislation regulating interstate commerce.

The bill to which the jobbers object is one which has been designed for this express purpose, so far as the sale of liquor is concerned. In a word, it simply provides that intoxicating liquors, including alcohol, may not be shipped into a State in violation of any law of that State itself. It can thus be seen at a glance that the object is merely to protect the State in the enforcement of its own acts. The chairman of the Committee on Legislation of the N. W. D. A., however, has issued a protest against the bill on the ground that it would greatly cripple the drug, perfume, and allied trades in dry territory by denying them alcohol with which to carry on manufacturing operations, and would further cripple the retail druggist by making it impossible for him to purchase wines and the like intended for sale on prescription for medicinal purposes.

There is much force in this argument, but it seems as if some form of bill might be drawn up which would protect dry States in the enforcement of their prohibition and anti-narcotic laws without crippling legitimate interstate commerce. On the one hand, it is scarcely open to doubt that if the people of a State want the liquor traffic killed within their borders they should have a right to demand of the Federal government that their purpose be not defeated by means of interstate shipments. On the other hand, it is equally true that the industries of a State ought not to be subjected to peril or destruction through overzealous restrictions put upon free commerce.

* * *

RAISING THE REQUIREMENTS.

The educational requirements in pharmacy are gradually being elevated, and actions of importance have been taken in three States during the last few weeks. In Pennsylvania the new Bureau of Professional Education, established by law at the last session of the legislature, has determined upon a completed first year high school course, or its equivalent, for licensure to practice pharmacy. In accordance with this standard the State Pharmaceutical Examining Board has adopted a new rule that applicants for license as assist-

ant pharmacist, applying after March 1, 1912, and applicants for license as pharmacists, matriculating after July, 1912, must have a certificate of preliminary educational qualification issued by the Bureau. In Missouri the Board of Pharmacy has likewise established the requirement of one year of high-school work or its equivalent.

In the State of Washington the Board of Pharmacy has formally declared that after July 1, 1913, all applicants for examination as registered pharmacists must have completed one year of work in a college of pharmacy recognized by the Board, and after July 1, 1914, this requirement will be advanced to full graduation from a college embracing at least a two years' course. The particular colleges to be "recognized" are the two State schools of pharmacy in Washington and such other schools and colleges as hold membership in the American Conference of Pharmaceutical Faculties.

The voluntary establishment of the graduation prerequisite by the Washington Board may seem somewhat arbitrary, but it would appear that the Board is given the necessary power by the pharmacy act to "prescribe the preliminary education of applicants for examination." The Washington Board, indeed, seems to be making a name for itself in several particulars. Among other things it recently summoned two registered pharmacists to show cause why their certificates should not be revoked because of the illegal sale of liquor. It has also adopted a regulation requiring assistant pharmacists to obtain full registration within two years or else cease practicing at the expiration of that time.

* * *

'PHONE MATTERS.

Telephone matters seem to be in a bad way in several sections of the country, notably in St. Louis and in certain cities in New York State. The telephone companies are evidencing an unfortunate disposition to cut down the druggists' commissions, usually to 10 per cent. In Buffalo the druggists entered a strong protest, and the result was that the company removed the booths from their stores. The local association took the matter up with the Public Service Commission, and at this writing a permanent adjustment has not been made.

In New York City something like 75 per cent of the pharmacists signed an agreement to act together in whatever measure should be taken against the company, and the last we heard a subcommittee of five had been appointed to deliver an ultimatum to the company to the effect that pay stations in all the stores would be at once discontinued unless adequate compensation were paid for services rendered. Previous to that the company had asked for 30 days' time in which to reconsider its notice of reduction.

In Rochester and Syracuse much the same conditions exist as in New York and Buffalo, except that there many of the druggists are taking the initiative by discontinuing their Bell pay stations. In Rochester the reduction was from 40 to 10 per cent, and this made the druggists particularly angry. In some instances the druggists took their grievance into the newspapers, and wherever that was done the company immediately retaliated by removing the booths and pay stations. In St. Louis also things seem to be in a bad state, and about the only hope the druggists apparently have is that some relief will be afforded by the investigation now being made into the whole telephone situation by the Public Service Commission.

* * *

DOCTORS COMPLAINING TOO.

Druggists for years past have voiced their opposition to the gratuitous distribution of serums and other supplies by municipal authorities. They have no objection if the city furnishes antitoxin free to people who are really poverty-stricken. But they feel that not a few avail themselves of the privilege who are abundantly able to pay for the supplies.

Now the physicians, too, are beginning to complain about governmental interference with private practice. Too much medical service is bestowed gratis. Present standards of humanity make it easy for politicians in the big cities to establish hospitals for the free treatment of disease to the obvious injury of independent physicians not affiliated with the institutions. This is regarded as a downright imposition on the rights of the private practitioner just as much as the gratuitous distribution of serum is unfair to the pharmacists. In either profession years of study and expensive laboratory courses are required of candidates

for a degree. No wonder they feel aggrieved if, after a lengthy training, the graduates find their functions usurped by a paternalistic government.

It is distinctly un-American. As for charity, it is a question whether the recipients of such benefits are the better for them. Charity abused means injury to the poor as well as to the taxpayer. And as for the physician, his income is already sufficiently depleted by modern sanitation and hygiene without the health officers interfering in his cases. The regular city hospitals, too, are giving cause for complaint. Such institutions, where the well-to-do as well as the poor may enter, mean injury not only to the general medical practitioner but also to the pharmacist. For too often the inmates are people of fair means who enter hospitals chiefly to avoid paying a doctor his fee and the pharmacist his drug bill.

* * *

AFTER THE DOPE SELLERS.

Last winter the Pennsylvania Board of Pharmacy carried on a vigorous warfare against the illegitimate sale of narcotics in Philadelphia. This winter the scene shifts to San Francisco, where the California Board of Pharmacy is waging a similar campaign. It would seem from newspaper clippings which have been sent to us that a lot of good is being done in 'Frisco, and that the dope sellers are on the run. One druggist has been arrested who is claimed to be the "leader of the drug ring." This man is said to be the head and center of a distributing system by means of which narcotics were shipped in and out of 'Frisco. One of the ramifications was a fictitious company at that famous divorce transfer point, Reno, Nevada, and when things got hot dope was shipped to this concern from 'Frisco, and from there back across the State border to the consumer direct, thus evading the California law.

After the fellow had been arrested 1100 ounces of narcotics, consigned to him, were seized at a freight house at the ferry. The wholesale cost was placed at \$6000 and the retail valuation at \$20,000. So great was the consumption of narcotics that the "drug ring" was said not to be able to get all of its supplies from this country, but to be purchasing heavily every month from a concern in London, England.

What makes the narcotic situation so complex in San Francisco is the presence of so many opium-smoking Chinese, and several Chinamen have been arrested as the result of the detective work done by the Board of Pharmacy. The druggists of the city are standing by the Board, and the local association recently passed resolutions of support and coöperation.

* * *

SENATOR OWEN AMENDS HIS BILL.

The objections to the Owen bill for a National department of health at Washington have arisen largely out of a belief that such a department would interfere with private practice, medical and pharmaceutical. The N. A. R. D. at the Niagara Falls convention passed a resolution to the effect that, at least one governing member of the proposed department or bureau be a pharmacist. If the right man were appointed, this would not only give pharmacy representation but likewise a certain amount of protection. However, it must be admitted that fear of the bill has been quieted by the recent amendment moved by Senator Owen himself. It shows plainly that the purpose of the bill is to prevent disease without interfering with its particular method of treatment. The amendment reads as follows:

That the department of health established by this act shall have no power to regulate the practice of medicine or the practice of healing, or to interfere with the right of a citizen to employ the practitioner of his choice, within any State of the Union, and all appointments within the department shall be made without discrimination against any school of medicine or of healing.

With this amendment adopted, there seems little room for objection to the Owen bill.

* * *

DR. SANDER DEAD.

The death of Dr. Enno Sander removes one of the interesting figures in pharmacy. Dr. Sander was 90 years old, and his sprightliness combined with his longevity had for many years been cause for comment. He was formerly active in the American Pharmaceutical Association and among other capacities had served the organization as its president. In his home city of St. Louis he was always prominent in pharmaceutical and scientific circles, and he served as treasurer of the St. Louis Academy of Science for a period of 46

years. He was also one of the mainstays of the St. Louis College of Pharmacy. Ten years ago Dr. Sander's numerous friends made him the guest of honor at a banquet in celebration of his eightieth birthday, and it is an interesting fact that the souvenir of this occasion was only distributed a few weeks ago. Dr. Sander was a bachelor and made his home at the Washington Hotel. The funeral, which was held on February 15, was attended by officers of the St. Louis Academy of Science, officers of the St. Louis College of Pharmacy, several members of the Chicago Veteran Druggists' Association, and representatives of other bodies with which Dr. Sander had been closely affiliated.

* * *

It is exceedingly gratifying to report that a marble tablet in memory of Prof. William M. Searby has been placed in the entrance hall of the California College of Pharmacy—the institution which he served so long and so ably. The unveiling ceremonies were held recently, and the principal address was made by Dr. Benjamin Ide Wheeler, president of the University.

* * *

The State Board of Health in Louisiana, and the State Board of Pharmacy in Iowa, have recently ruled that the sale of proprietary articles and pharmaceutical supplies is prohibited except in regularly established drug stores. It is to be hoped that these regulations will prove enforceable.

* * *

Charles H. Huhn, ex-president of the N. A. R. D., the A. D. S., and a few other things, was recently appointed to membership on the Minnesota Board of Pharmacy while he was in New York on a business trip. It was rather unkind to take advantage of the man's absence in that way!

* * *

Edward P. Dehner, a well-known druggist and Democratic politician in Cleveland, died recently from pneumonia. A portrait and a sketch of Mr. Dehner's political activities were published by us in the BULLETIN for February of last year.

EDITORIAL

THIS ISSUE OF THE BULLETIN.

We have tried hard to make the present number of the BULLETIN one of the best we have ever published. We should like to have you look it over and tell us what you think about it frankly, whether your opinions are favorable or unfavorable. In publishing a journal our supreme purpose is to please our readers, not ourselves, and we always like to know whether we are doing it or not. Suggestions are in order.

Here are some of the things in the present issue to which we should particularly like to call your attention:

1. In the first place, our Illustrated Section comprises six pages of nothing but pictures, and we certainly hope they will prove interesting. There are nine portraits of well-known jobbers, nine portraits of presidents of State pharmaceutical associations, a special picture of the new president of the A. Ph. A. taken for us in his office, a full-page reproduction of the druggists' float used this year in that wonderful "Tournament of Roses" in Pasadena, and two full-page engravings of one of the most famous drug stores in the country—the headquarters establishment of the Judge & Dolph Company in St. Louis.

2. We have induced ten successful druggists, from different sections of the country, to tell our readers what methods they use in the collection of bills, and what schemes they employ to prevent "dead-beats" from "working" them. These ten contributions will be found of the utmost value and practical interest.

3. We are beginning with this issue a series of articles on sundries which will run for several months. These will all be written by experts and they will contain technical information which will enable the druggist to talk side lines to his customers more intelligently. The contribution this month is devoted to chamois skins, and others will discuss rubber goods, brushes, razor-strops, and the like.

4. The autobiography of Mr. Farrington, which began in the January number, will be continued for several months. This plain, practical, helpful story of how an average druggist worked out his destiny in a country

town is proving most readable and suggestive to our subscribers.

5. A series of articles on "My Best Paying Side Line" is being inaugurated in this issue. These papers have been called forth by one of our recent prize offers, and we are collecting a lot of most valuable material. Many of the side-lines described are novel in character, as is the case with the first article published this month, and the net result of the whole series will be that our readers will receive many tips in their endeavor to increase business and make more money.

As usual, too, we are printing some articles purely of an entertaining character. In this class is the instalment of "Exciting Experiences." For the rest, we have sought in the various departments to crain the journal full of the most practical, useful, helpful material we could buy, beg, borrow or steal, and we hope this issue of the BULLETIN will prove to be what we are so anxious to make it.

LIME-WATER ONCE MORE.

Many druggists are very careless about the preparation and handling of lime-water. They seem to look upon the product as being of doubtful efficiency anyway, and they fall more or less unconsciously into the habit of assuming that it doesn't matter very much whether the lime is present in full strength or not. Quite frequently, too, lime-water is given away by druggists, and this custom contributes to the general attitude of indifference toward the substance.

And yet, every once in a while, an investigation is made, things are found not as they should be, and druggists are warned that they must mend their ways. Thus several years ago the Pennsylvania State Pharmaceutical Examining Board had samples of lime-water purchased from 300 druggists. It was found on that occasion that 181 of the specimens were below the U. S. P. requirements! Many of them were less than one-half, less even than one-quarter, strength, and some of them were no better than hydrant water.

An interesting article, entitled "Where Does the Average Druggist Get His Lime?" was contributed by Prof. Charles H. LaWall

to the last meeting of the New Jersey Pharmaceutical Association. Professor LaWall explained that he had started out by selecting twelve prominent pharmacists—men who were leaders in association work. He had asked them two questions: First, "Where do you get your lime?" and secondly, "How do you test your lime-water?" Five of the twelve men replied that they used a pulverized calcium oxide put up specially for the preparation of lime-water; two others used another form of special lime; one man employed "selected building lime;" another got his material from the "nearest building operation;" another from the "lime dealer;" while still another man declared that he got his lime anywhere he could!

So much for the lime employed in making lime-water. As for the extent to which these twelve men tested the resulting product, Professor LaWall was very much discouraged to find that only one of them titrated the preparation by the U. S. P. method. Six of the twelve men practically declared that they did not test their lime-water at all; three asserted that they tasted it; one man blew into it through soda straws; while another added solution of ammonium carbonate and noted the bulk of the precipitate.

Now, then, asks Professor LaWall, "If only about 8 per cent of the leading professional pharmacists actually test their lime-water, what percentage make use of the more complicated assay processes or quantitative methods of estimation of constituents indicating medicinal activity?" This question, as the Professor went on to explain, is one which has an important bearing upon pharmacopœial revision work, for the revisors are constantly endeavoring to so simplify all processes as to make them applicable by the average retail pharmacist. If the pharmacists are not going to employ them, what is the use of having them?

We venture the assertion, in partial reply to this indictment, that for reasons already mentioned the druggist is more careless in the preparation of lime-water than he is with the great majority of products in his stock. There will be an awakening as the food and drug laws become more stringent, and as the enforcement of them becomes more general.

THE SPIRIT OF RESTLESSNESS.

Generations ago caste spirit was strong. Men lived their lives on a single plane. The son's position was that of his father. Nor was there any chance of altering one's position in life. Caste ties were too strong to be broken.

What was the result? Were men more satisfied with their lot than they are to-day? No. More complacent? Not a bit. But they were more resigned. They accepted their fortune with a spirit of stoicism, bore their disappointments without grieving and without resentment.

But to-day how changed is all this! Instead of repressed emotion and a calm indifference to the vicissitudes of life, we hear everywhere the murmuring of the disgruntled. Workingmen, far from accepting their due with resignation, chafe under their restraints. In Europe where caste ties are strong there is perhaps less of this. But certainly in America the very possibility of extricating oneself and family from the mire is sufficient to stir the ambition of men.

Everywhere is seen a spirit of restlessness. It is characteristic of the age. Even pharmacy feels it. The National Association of Drug Clerks had hardly been organized when it was approached by the American Federation of Labor and invited to join. The clerks refused, however, on the ground that pharmacy, being a profession, could not be identified with labor. It was no slap at unionism. A drug clerks' association is not in the nature of things suited to join the Federation. You can dictate to a man how many bricks he shall lay a day after the fashion of the union. But it would be hard to specify the number of pills that constitute a fair day's work for a pharmacist. The duties of the pharmacist are too numerous to permit of a prescribed standard.

Nor would such a standard be desirable. The drug business would suffer by it. It would be unwise to limit the output of any pharmacist. The clerk should be free to "realize" himself. He should be allowed to work to the maximum of his individual capacity unfettered and without restraint. Why, the greatest spur to effort in any industry is the realization that by dint of toil one can lift himself out of his present level to a higher plane! We see that sort of thing done every

day. Borrowers becoming lenders, wage-earners becoming capitalists. Likewise the rich are seen to step down from capitalism to a position of dependence.

These very changes of fortune keep business interesting. And it must be ever so. Men are not all equal. Neither are the stars, nor the things that grow. No two planets are alike, no two trees. Nature is the law of infinite variety. And what is true of nature is true of men. There are bound to be differences of thrift, of economy, of self-denial, of hard, downright industry. Individuals will always differ in capacity. Some are intended to be clerks, some proprietors, and lucky is the man who knows his place.

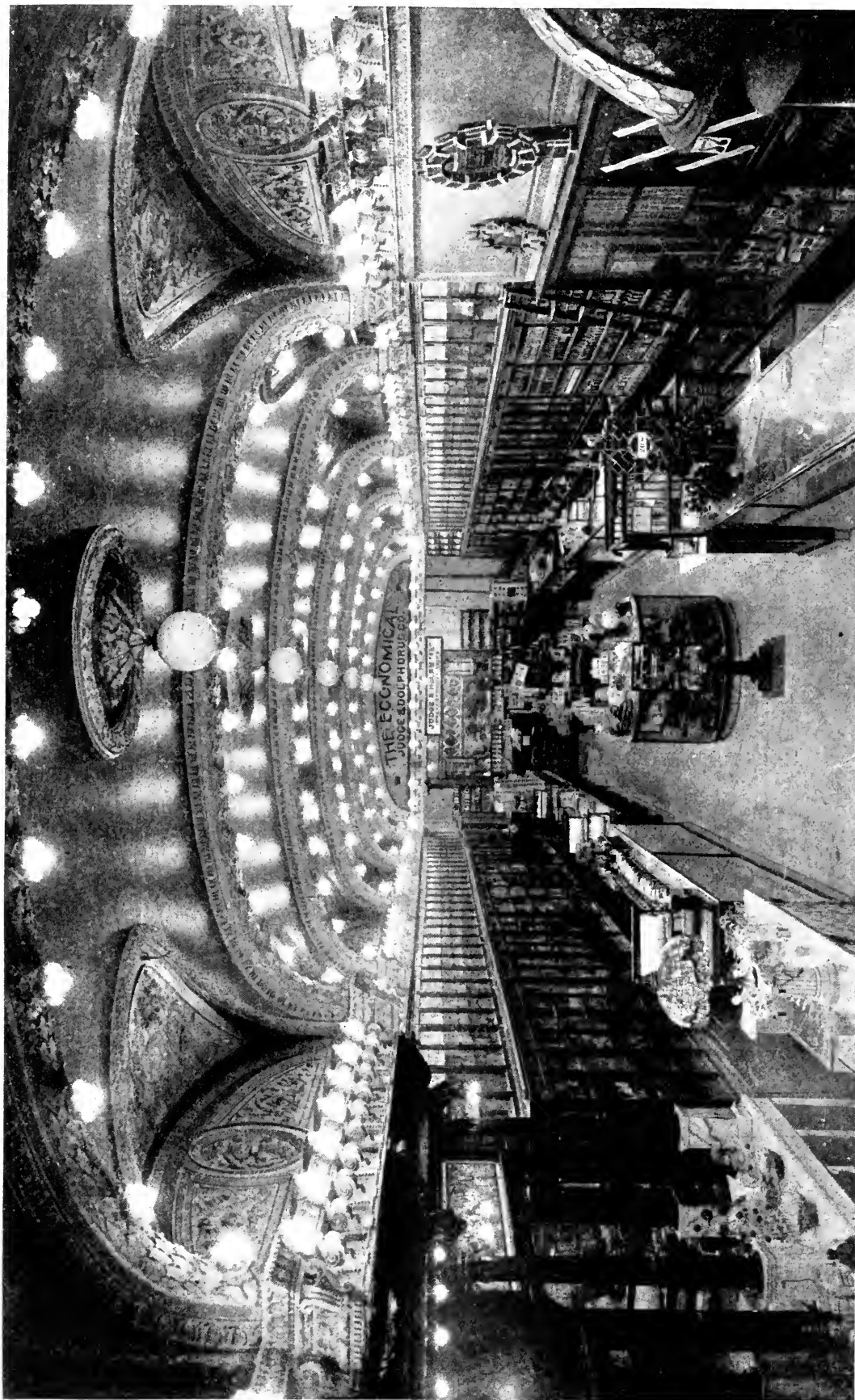
Nor must it be supposed that labor is the cause of all wealth in the drug business. Wealth springs often from inventiveness, from a capacity to make two blades of grass grow where one grew before, from an ability to accomplish with one dollar what another requires two to do. Labor admittedly spells a lot in the success of every venture, but not all by any means.

OUR PRIZE OFFERS.

We have recently been announcing in the BULLETIN three prize contests. For two of them we have now had a sufficient number of entries, and the Prize Committees will soon make the awards and announce the results. We are referring now to the prize offers for best formulas for a hair tonic and best papers on the sale and fitting of trusses.

Our third prize contest, however, is still open—the one in which we offer to pay \$5.00 for every accepted article on "My Best Paying Side Line." This has brought forth some excellent material, and the first of the many papers we have received is being published this month. The subject of side-lines is so important, though, that we should be glad to have other contributions submitted from time to time, even though it may be many months before we can use them.

The Burrough Bros. Manufacturing Co., manufacturing chemists of Baltimore, has gone into the hands of a receiver. Insufficient working capital, it has been stated, rendered it impossible to continue the business.



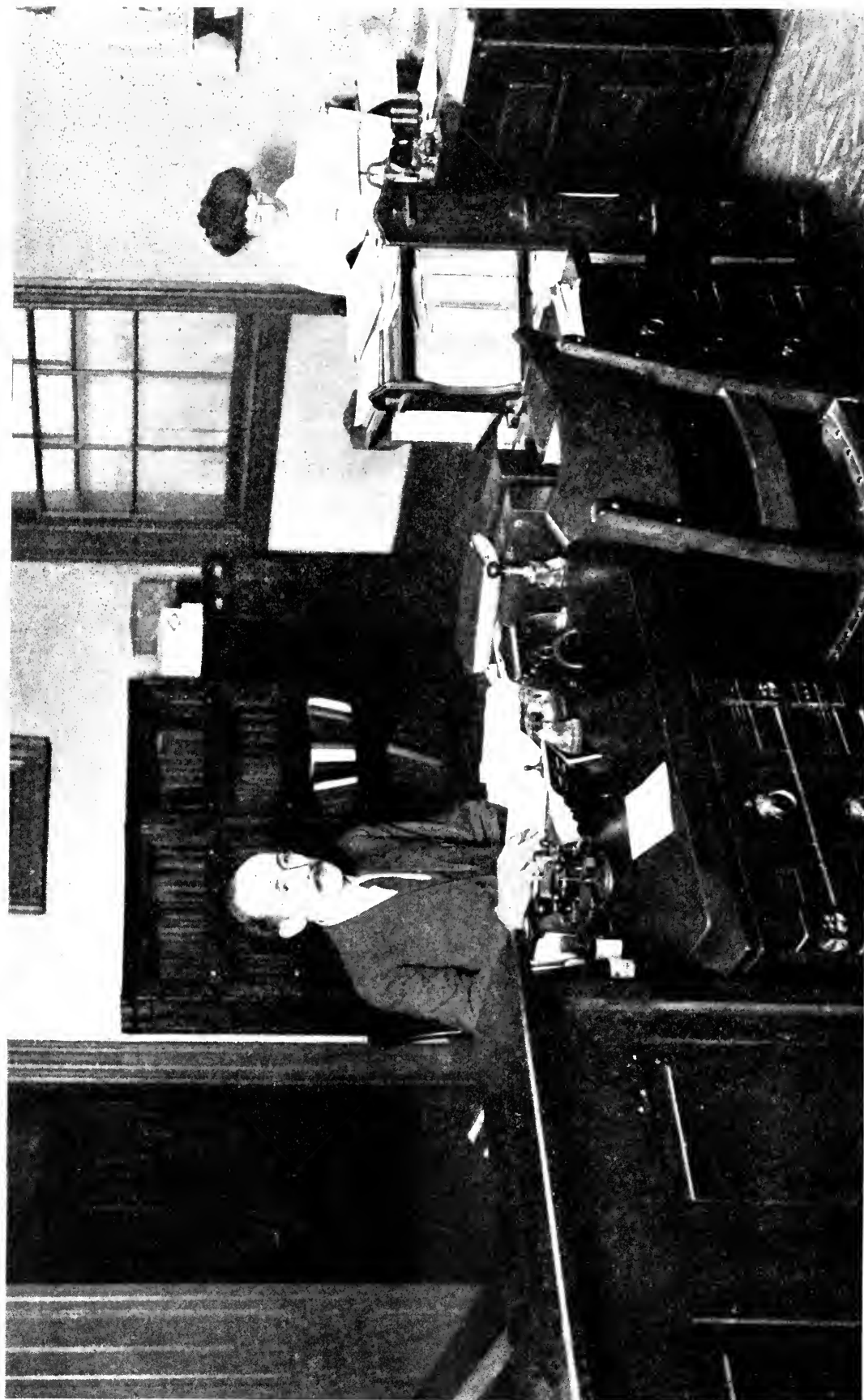
The Big Judge & Dolph Pharmacy in St. Louis.

The Judge & Dolph Drug Co. own and conduct a chain of three prosperous stores in St. Louis. Our picture shows the salesroom of the headquarters establishment at 515 Olive Street. Here an entire building of six stories and basement is utilized, and a trip through the place conveys an eloquent lesson of the present-day possibilities in the drug business if the opportunities are seized upon and followed up by men of brains, capital, and commercial instinct. One hundred people are employed in the headquarters building alone.



The Big Judge & Dolph Pharmacy in St. Louis.

This picture shows the new iceless fountain furnished by the Bishop-Babcock-Becker Co. at the headquarters store of the Judge & Dolph people a year or two ago. It is located at the immediate left of the front entrance. Everybody told Mr. Judge that he made a mistake in throwing out the stools when the new fountain was installed, but he argued that when people sat down to drink their soda they stayed twice as long, and that without stools it would be possible to serve double the number of customers. His judgment has been vindicated—the soda business is about twice what it was before the change was made.



[Photograph made especially for the BULLETIN OF PHARMACY.]

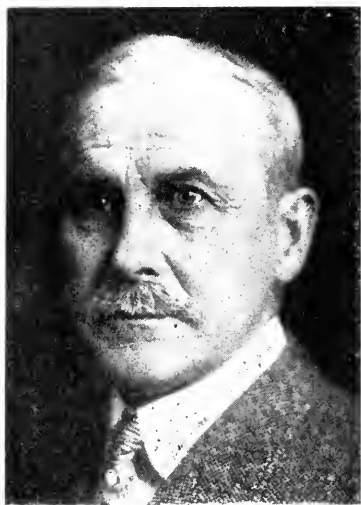
The New President of the American Pharmaceutical Association.

Prof. William B. Day, recently elected president of the A. Ph. A. for the year 1912-13, was photographed for the BULLETIN OF PHARMACY in his office at the School of Pharmacy of the University of Illinois, in Chicago. Professor Day is the secretary of the faculty, is really the business manager of the institution, and is acting Dean during the absence this year of Professor Goodman.

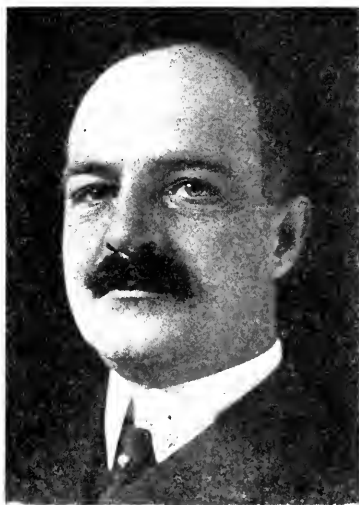


Float of Pasadena Druggists in the Annual Tournament of Roses.

This brilliant spectacle is one of the annual delights in the wondrously beautiful city of Pasadena, Cal. Usually each group of business men get up for the parade a float representing their particular branch of trade or industry, and we are showing the one used for the druggists of the city in the tournament this year. The four beautiful women who added the last touch of grace to the float are unfortunately not very well seen in the engraving.



E. H. Nelson, President and General Manager of Nelson, Baker & Co., Detroit.



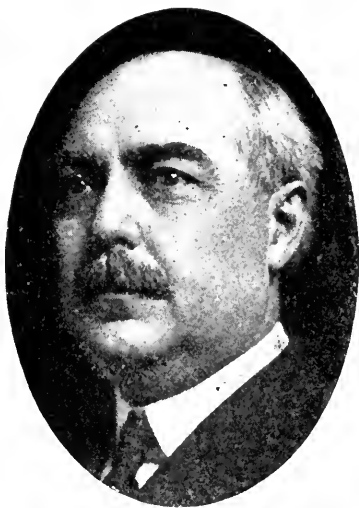
Frank G. Ryan, President of Parke, Davis & Co., Detroit, Mich.



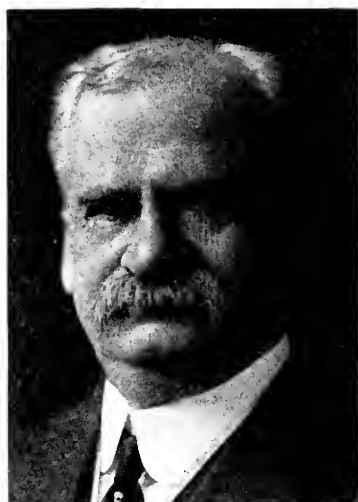
F. K. Stearns, President of Frederick Stearns & Co., Detroit, Mich.



G. A. Pfeiffer, Secretary and Treasurer of Wm. R. Warner & Co., Philadelphia.



J. K. Lilly, President of Eli Lilly & Co., Indianapolis, Ind.



George Merrell, President and Treasurer of William S. Merrell Chemical Co.



E. G. Swift, Secretary and General Manager of Parke, Davis & Co., Detroit.



E. Stauffen, Treasurer and General Manager of Sharp & Dohme, Baltimore, Md.



Theodore Weicker, Vice-President of E. R. Squibb & Sons, New York, N. Y.



Edward A. Fuge, Minneapolis Drug Co.,
Minneapolis, Minn.



H. B. French, Smith, Kline & French Co.,
Philadelphia, Pa.



Frank A. Faxon, Faxon & Gallagher Drug
Co., Kansas City, Mo.



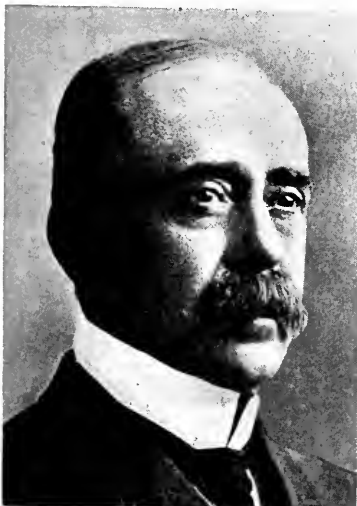
Charles S. Martin, Spurlock-Neal Co.,
Nashville, Tenn.



Edgar D. Taylor, Powers-Taylor Drug Co.,
Richmond, Va.



C. P. Noyes, Noyes Bros. & Cutler, St.
Paul, Minn.



P. P. Van Vleet, Van Vleet-Mansfield
Drug Co., Memphis, Tenn.



James W. Morrisson, Morrisson, Plummer
& Co., Chicago.



Cyrus P. Walbridge, J.S. Merrell Drug Co.,
St. Louis, Mo.

A DEBATE ON COLLECTIONS.

Ten Live Druggists Tell How They Make the Debtor Disgorge—The Systematic Mailing of Statements—Keeping Poor Accounts Off the Books—Bringing Delinquents to Time by Personal Solicitation or Through the Intervention of a Collection Agency—Other Methods of "Cleaning Up."

It would be hard to conceive of a subject fraught with more practical importance to the druggist than that of making collections. Fortunate indeed is the man who goes through the year without incurring a number of worthless accounts. To his disappointment, people whom he considers trustworthy often prove otherwise. A certain number of undesirables gain accommodations at the store despite every effort to keep them out. The druggist has every kind of delinquent to handle, from the man who is slow but sure to the downright dead-beat who won't pay his bills and can't be made to. In this symposium we present the ways and means adopted by the different pharmacists to safeguard themselves against such customers. They tell how to prevent debtors from piling up accounts. They describe how they make collections successfully from people who are as reluctant to pay the druggist as they are the doctor. Their contributions should be read with profit and interest by our subscribers generally.—THE EDITORS.

BY ERNST O. ENGSTROM, PITTSFIELD, MASS.

The National cash register cash and credit statement book number 14 gives me the information needed to determine the condition of

make a special effort to collect. Last year, 5 months I collected more than I charged, 7 months I charged more than I collected.

HIS CREDIT LOSSES.

During the month of January I make a list of all accounts due me and compare their total with the amount I should have according to the record kept, during the year. I always find a small loss due to allowances or some other cause. I also destroy records of such accounts as are impossible to collect, as it is a waste of stamps, time and worry without any returns to try to collect them. I lose about 1 per cent, and the most I have ever charged to this loss is 2 per cent. This year I lost \$86.

I send out bills every month to most of my credit customers whose accounts I carry on my books regularly. To customers who seldom ask for credit I send bills once every two months. I carry the latter class of accounts in a filing case and divide the accounts in two sections, sending out the accounts filed under letters A to M, one month, and the others under N to Z, the following month.

To any person who needs medicine and brings in a bona fide prescription I will give credit if needed. I am also willing to trust such persons as I find have had a prolonged



E. O. Engstrom.

my credit business. With the use of this book, I know the amount due on credit sales, and if a month shows that my credit sales are more than the amount received on account, I

sickness in the family and heavier expenses than usual. I have lost many of these smaller accounts, but I believe it is a part of charity we should practice. If I cannot collect such accounts within one year after making the last charge, the best way is to destroy all record of them. It helps your peace of mind.

COLLECTING FROM DOCTORS.

Doctors are different. It is hard to understand their ideas on the payment of accounts. Each man has to be treated by himself.

Most of them pay promptly if you let them understand that you need the money. And if mailing statements does not bring any returns, a personal interview is the most effective. Sending your clerks to collect does not bring the results unless the doctor is a personal friend of the clerk. If doctors are inclined to believe that we as druggists should furnish the medicine they give their patients to the detriment of our business, I let them understand they cannot get any goods from me without cash. I treat the accounts of doctors in the same manner as those of others with the above exception.

GETTING AFTER THE HARD ONES.

I send one of my clerks out a few times during the year to find out from a debtor the reason why no attention has been paid to the several statements sent. I inquire whether the bill is wrong, or whether there are any other reasons why it should not be paid. I never have tried to collect any accounts through collection agencies or lawyers unless my debtor were declared a bankrupt. A few years ago I gave a lawyer certain bills to collect. He asked me whether I did not have some I could not collect myself. I handed him about \$50 worth of worthless accounts. He did not collect any, but I received \$3.75 from one delinquent and the lawyer claimed I should pay \$2.50 for postage, etc. The collection of \$3.75 was made possible by the fact that the man I had trusted inherited a small amount from an uncle who died.

I believe that we ourselves are the best collectors, if we only keep constantly at it and know how our credit business stands. The extra efforts which I mentioned are simply to write a few words at the foot of the statements sent out, asking for payment. I word this statement to suit each case.

BY S. L. HILTON, WASHINGTON, D. C.

Conducting a credit business, in my judgment, is one of the most vital subjects the retail druggist has to handle. There are many things in connection with a credit business that are usually overlooked, as, for instance, What percentage of credit sales are forgotten to be charged by both proprietor and clerks? What percentage of the total yearly credit business has to be charged to profit and loss? What percentage of increased profit has to be added to the selling price of goods, when sold on credit, to make up for losses sustained by failure to make charges and also to cover bills impossible to collect?

CASH BUSINESS BEST.

I am frank to admit that usually you can dispose of more goods when sold on credit than what is possible on a cash basis or where



S. L. Hilton.

only a limited credit business is conducted. Personally I would much prefer to do a smaller business for cash than a larger one with numerous credit accounts, for the reason that I do not have to take into consideration the question of collecting, nor have I the extra labor entailed thereby, in keeping accounts, mailing bills, etc., and the consequent expense. The time necessary to keep accounts and make out bills, let alone the losses bound to follow, is certainly worth money. Yet in the large majority of cases these facts are not taken into consideration. Consequently the net profit at the end of the year, on a credit business, no matter how carefully conducted, will be less than would accrue from the same volume of business done on a cash basis.

I never fail to send out bills each month,

no matter how small they may be, and have done so during the twenty years or more of my business. These bills are mailed and received by the customer on the first day of each month provided it is not Sunday.

"FOLLOWING UP" ACCOUNTS.

My method of following up accounts is this:

I send the bill again with a statement to the effect that our business is cash. In exceptional cases, credit is extended for a limited time only. Under no circumstances can bills run over thirty days.

If bills are not paid after these preliminaries, I call on the parties personally. I never send any one to make collections until after I have seen them personally and have failed to obtain a settlement.

I never extend credit to any one unless he gives references. I look him up personally or communicate by phone and invariably I will follow my first impressions. I make it a point to inform the customer that credit is extended for 30 days only and that I expect prompt settlement of bills when rendered. It is a great mistake in my judgment not to let credit customers understand at the outset when you expect settlements. Of course an occasional person, no matter how careful you may be, will slip in, in a great hurry for a prescription, or some trifle, on credit. This cannot be avoided. But if he attempts to run or start an account by this method, I look upon him as suspicious and demand to know something of his financial responsibility. I ask for references to learn about his standing and promptness in settling his obligations.

SOME FIGURES.

My credit business does not exceed \$200.00 a month and my records will show that during the past 15 years my losses have not exceeded \$25.00 a year. I believe fully in the principle that when people ask for credit, they are the ones receiving the accommodation. You are accommodating them with your goods, your money, and you are in a position to dictate terms to them the same as a banker does when he loans you money, and insists on the terms being carried out. If your demands are not acceded to then at the end of the period mutually agreed upon at the outset, you should close the account and request settlement. This action, while it no doubt angers some, is proper. Those who take offense are

the class you do not care for. One is far better off without their trade than with it unless on a cash basis. It will also be evident that at this point your loss is the smallest possible loss you are going to have. Therefore, is it not better to take the loss at the end of the period mutually agreed upon, if prompt settlement is not made or a good excuse given, than to go along for months with all of the worry and labor connected with such accounts and in the end lose more than what would be lost the first month? Take your loss promptly and be done with it. As soon as credit customers know and understand that it is purely a business proposition and that you are conducting your business on this basis, you will have little trouble and exceedingly small losses.

BY A PACIFIC COAST PHARMACIST.

We do a credit business, and it is our practice to send out statements regularly every month whether there are any additional purchases for the current month or not.

We employ a collector to whom a certain portion of our accounts are submitted each month. We open accounts with the understanding that they are to be settled on the first of each month. We also place a credit limit on each account. If our terms are not complied with, then we attach a sticker to the statement, like the one illustrated.

If the credit limit is exhausted, the matter is called to our attention by our bookkeeper. If in our judgment it seems necessary, the customer is notified that we should not like to extend the account further, and he is asked to keep it within its present limit by paying cash, and in addition to conform to our regular terms of monthly settlements.

We do not personally collect, but we have reports made to us daily by our collector, and in case of any disputed accounts, or of any complaint of service, by our customers, we take it up by letter or personal interview.

BE CAUTIOUS ABOUT GRANTING CREDIT.

We discriminate in the matter of opening accounts so as to guard against "dead beats." This is done first by requiring references from prospective customers as to their dealings elsewhere, and secondly by obtaining confidential reports from a local commercial agency. We allow none of our clerks the discretion of

opening accounts, requiring that they be approved by the management except in emergencies and on orders for urgent medicines. Then we allow them to make charges which they distinctly state to the customer are temporary and do not constitute a formal opening of an account that can be enlarged. These accounts are then investigated, and if the customer

PLEASE NOTE TERMS

Our terms for credit accounts are prompt settlement each thirty days. Selling as we do all our goods at the lowest cash price, it is necessary for us to make this requirement.

"JONES" DRUG CO.

This sticker is attached to statements of accounts 30 days overdue.

seems to be a desirable risk, a letter is written inviting him to open an account for his convenience and ours.

In case our terms are not complied with then, customers are temporarily suspended from credit, and notified to this effect, subject to reinstatement when our requirements have been met. In the case of "dead beats" or of accounts that are being wilfully neglected, we notify the customer of our intention to offer the account for sale through the Credit Underwriters' Association. This association places forms of letters in our hands in series of three that are to be exhausted before the account is actually turned over to them to be advertised for sale. The last one of these three letters carries with it a sample poster of ad-

Regarding this Account

We are members of the "Blank" County Retailers' Association, which includes all the prominent retailers in Podunk and vicinity.

In order to maintain our policy of close prices, and also to meet our own obligations, it is our custom to turn over to the Association for collection accounts that have stood unpaid for so long as this.

However, all members are notified of accounts so placed, and we are withholding this, pending a prompt reply from you, either with a remittance or a statement as to when payment will be made.

"JONES" DRUG CO.

This sticker is gummed to statements of accounts 60 days overdue.

vertised accounts showing that accounts are actually offered for sale. In the event of settlement, the payments are either made to us or to the underwriters, who make charge only for the use of the letters, amounting to about 25 cents for each set. Besides, there are some few accounts that we turn over to law and collection agencies. But these are

usually accounts where the contractors have moved out of our location.

NO GENERAL RULE POSSIBLE.

In conclusion let me say that while we use printed notices and form letters, there is no system that can be simply placed in operation and be expected to take care of itself. Tact and judgment must be used all along the line. It must be borne in mind that in addition to collecting an account, we are also interested in retaining our customer and his good-will. Even in the most flagrant cases of delinquency of payment, the customer should be made to feel that we are thoughtful both of his interests and his feelings, and given to understand that only business necessity requires the pressing of his account. Now this, of course, is a statement regarding methods applicable to trade in the larger cities. In rural communities entirely different methods would have to be followed.

BY ARCH KRIEG, CHARLESTON, W. VA.

Of all the "bum" collectors that ever conducted a business, the "bun" belongs to me. My advice and methods, therefore, are given in order to show others how not to do it. As my fond parent remarked after he licked me once by mistake, "That's to teach you what will happen if you should ever do what I licked you for."

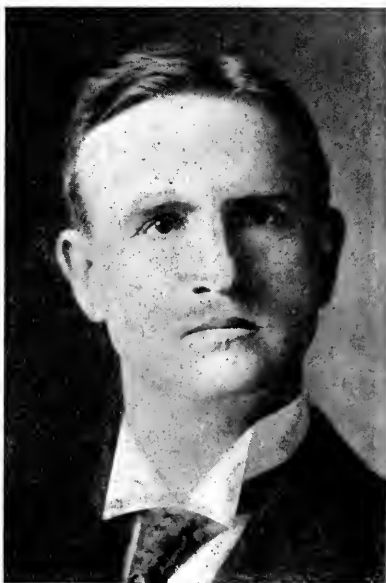
UNIQUE METHODS.

Yes, I send out monthly statements, usually getting responses sufficient to cover postage. But if a man should voluntarily come in to pay a bill, I would probably ask him, "Are you quite sure it is convenient for you to pay it now?" That makes him proud of his credit and causes him to insist on paying it at once, you know.

If a debtor does not come around and either make an excuse or a promise to pay, we send him another statement on the first of the following month. If he does not respond after three statements, we add on the next one we send him, "To work, postage, etc., on 4 statements, \$1.00." This always brings him around with a kick. I have never known it to fail yet. I have considered very seriously the plan of putting on statements the words, 25 cents extra charged for each additional statement sent, though that might ruin "the kick."

NO PITY ON DEAD-BEATS.

Sometimes after an account gets old enough to vote, we get real peevish and go after the chronic delinquent. Or if we get in a tight place for funds, which is almost a continuous performance with us, we send out a clerk or



Arch Krieg.

even a collector occasionally. And we have considered the advisability of sending out a book-agent or an insurance solicitor or even a lightning-rod agent in a few extreme cases.

As to chronic dead-beats, we have a list of all of them, for they have all worked us. And if any have missed us, it is because they failed to notice our advertisements or to read the newspapers. When they come to beat us again we have our hearts hardened ready for them and pull this list of names with the amounts opposite. Oh, we are without heart or compassion or one drop of the milk of human kindness when it comes to such.

We have no definite rule in the matter of giving credit. We have prevented opening long accounts in many instances, or what promised to be long accounts, by giving freely the first prescriptions, but with the distinct understanding that we would open no account. But even that plan must be practiced with great discrimination.

BY CHARLES W. J. H. HAHN, ST. LOUIS, MO.

To be sure I send out monthly statements. On the bottom of each one is printed conspicu-

ously, "Statements rendered monthly." If a customer feels insulted at this, he is not to be trusted.

As for our methods of following up accounts, a memorandum is made every time a statement is sent out. And when these memoranda total 3 or 4, we call the customer's attention to them and cut off his credit. If the bill is not paid, we are in the habit of sending the clerk or a collector to ask for the money. At times I have gone myself with good results.

LENIENT BUT CAUTIOUS.

Dead-beats are not allowed to get the best of us. I will trust any one the first time I am asked for credit. But I put the customer on his honor, asking him what day he will pay. If he pays as promised or makes a plausible excuse, he will get more credit. But again I ask him when he will pay. Memoranda of all promises are made, and if promises are not kept, the account is marked "No more credit." If a dead-beat moves away and we know



Chas. W. J. H. Hahn.

where to, we phone the druggist into whose neighborhood he moves.

The wage-earner or salaried man of \$75 per month or less, pays his debts more quickly than the man with more salary. In apartment houses or among people who move often, the credit as a rule is poor.

KEEPING AT IT!

A letter and statement sent to the place of employment often brings good results. A threat of garnishment of wages is sometimes fruitful. If the man who owes you a bill avoids meeting you, or trades with your neighbors, he is not to be trusted.

Monthly statements with a reminder "Kindly remit" prevents a dead-beat from asking for more credit. If he has the gall to ask for more, you must show the same gall and refuse him.

Sometimes I put the question to a near relative of the debtor, "What's the matter with so and so? Is he hard up? Can't he pay his bills?" This has brought me a number of dollars.

BY J. ARTHUR BEAN, SOMERVILLE, MASS.

We send out monthly statements by mail to all who have had goods charged.

In following up accounts, we have sent one of the oldest clerks to pay a personal visit to



J. A. Bean.

the delinquent of long standing. But this is not required very often. I seldom go out myself. If the account is very old I hand it to a reliable collection agent who collects on a percentage basis.

We do not extend credit to any strangers unless they can prove they are worthy. If they are poor and need medicine, we give it to them. But these cases are rare in my locality. We simply do not give up any goods

unless the cash is forthcoming, and that is the reason we have very few bad accounts on the books at the close of the year.

If a new customer moves into our district and wants credit, we ask for references. Then we inquire of the other merchants in our district and find whether the newcomer is all right. Until we are shown that he is, we keep him on a cash basis. Our reply is always, "We do only a cash business." For that reason we have very little credit business. We think after an experience of 15 years that it pays to keep near a cash basis. We have a number of customers to whom we extend a large credit, and we welcome their business as they are always good. But we have not many of these accounts.

I believe that the character of the locality determines in a measure whether one should extend credit to people.

BY JOHN M. LAUE, PORTLAND, OREGON.

The druggist who does a credit business—and nearly every druggist does—must have some method of making collections and preventing people from piling up bills which they never pay.

It is our regular practice to send out monthly statements or other reminders to our debtors.

We have other methods for following up book accounts vigorously. Personal interview three times per month with the delinquent represents one way.

If bills are not paid, I send the clerk first. If he is not successful, I go myself and get it.

As for preventing dead-beats from getting the best of us, we have been in business so long that we know whom to trust.

In general, in giving credit and making collections, to keep losses down to a minimum, I follow this method: I do not solicit a general credit business. This is very possible with us as our store is centrally located and has a large transient cash trade.

BY WM. O. FRAILEY, LANCASTER, PA.

I try to avoid the necessity of collections. I fight hard against credit sales. And as the average purchases in the drug store are small, I feel that it should be no hardship for people to pay cash. When I extend credit it is to

some one I am almost sure is good pay. In other cases conveying a hard-luck tale and no money, with a prescription to be filled, I look on the matter as a question of charity.

In spite of this attitude, however, we do some credit business. We do not have much trouble to collect our bills. Most of our credit customers are good paying people and we lose very little money and very few accounts by trusting people. We have no regular monthly system of sending bills or statements, as we should and would if we were doing much credit business. We do manage to send statements about every three months and we usually receive prompt response. It is very seldom necessary to dun people personally for their accounts.

I have adopted your system of accounting



Wm. O. Frailey.

as illustrated in the BULLETIN in the December issue, page 501. It is now in use in both of my stores. My inventories in both stores show up well, and I feel that I am now in pretty good shape.

The inventories developed that I have too little insurance, which I am correcting.

BY D. J. FINK, HOLDREGE, NEB.

Not to exceed 10 per cent of my business is credit. On the first of the year, I figured up my losses on book accounts for the past 15 years. They averaged \$32 a year. This represents a very small loss in comparison to the business done.

I do not make it a practice to send out monthly statements or other reminders to

creditors. I go out about every three months and give them to understand the reason I am out is because I need and want the money. I always do the collecting. I usually find that when I can't collect a bill, it is lost. The only



D. J. Fink.

thing to do in the case of dead-beats is to look them up as soon as they ask credit. If they are unworthy, cut them out while the account is small. This I do.

BY G. A. P. LICHTHARDT, SACRAMENTO, CAL.

It is my practice to send monthly statements on the first day of each month to regular credit customers who, as a rule, remit promptly. The small odds-and-ends bills are collected by one of the clerks. These accounts are seldom allowed to become more than a month old as it has been my experience that they are the hardest to collect. It is here that the greatest loss occurs, for the amounts are small and quickly forgotten. Or the people who owe them are of the roving type, who move from place to place and neglect to notify their creditors where they are going.

FINAL MEASURES.

If the bills are not paid after repeated efforts to collect them and no reasonable or legitimate excuse is given, they are sent to a professional bad-debt collector. Or if the account warrants it, suit is brought.

As an example, some years ago a man, who had been a credit customer and had paid promptly for two or three years, refused to pay for a 75-cent prescription which had been

filled for his wife; so after presenting this bill two or three times and having our collector told "Let Lichthardt send that bill to a bad-debt collector and pay 25-per-cent commission," suit was instituted promptly for the amount and costs. The result was that Mr. Man was out some eight or ten dollars instead of six bits.

INVESTIGATE NEWCOMERS.

We have made it a rule to extend no credit or open any new accounts unless by strict investigation we find the applicant to be worthy. Of course, once in a while we do fill prescriptions when we know that the people are in no

position to pay for them. But this is seldom. Our store is no bureau of public comfort nor are we in the million-dollar class. We cannot take the place of the free dispensary run by the city and county of Sacramento.

Nevertheless this sort of business is bad and with all the care that one can take losses are bound to occur. The best way to keep these losses down is to be brave enough to say no. For let it be remembered that it is better to do a small cash business than it is to listen to the song of the siren of large credit and have your little ship of business wrecked upon the rocks of misplaced confidence.

"MY BEST PAYING SIDE-LINE."

The First Article in an Important Series by Different Druggists, in which Each Tells what Class of Goods has Paid Him Best—You'd Never Guess What the Particular Side-line was this Time, but it Brought in the Dollars!

By H. KALLIWODA.

A side-line, is it? Well, I guess I can give you one that will make you scratch your whiskers! It is clean and easy to handle—it requires no special training, and it pays a good profit.

This line is original with me, I believe. It has been ridiculed and sneered at, as original ideas most generally are, but it butters my bread, and pays better than stamps and "kill or cure" soap.

Hosiery! Whodathunkit? That's my line. It got its start by my keeping woolen socks for rheumatics and people with colds. But the madame wasn't benefited materially by this, so I immediately put in a full line of hose, woolen and cotton, for baby as well as for grandpa. It paid. I have a nice little trade, and I find it pays better than cigars.

Look and see the difference!

Cigars require a large investment, also care. Some get broken. Many are sold at 6, 7, and 8 for 25 cents, and many's the time I have to set 'em up to the boys.

On the other hand, socks require but a small investment, little care, never crack or break, and I never lose by a treat. They pay from 35 to 50 per cent and are no more foreign to

drugs than are cigars, pencils, candy, etc. So there now!

10-cent hose cost 75 cents per dozen.

15-cent hose cost from \$1.00 to \$1.15 a dozen.

25-cent hose cost from \$1.85 to \$2.25 a dozen.

50-cent hose cost about \$4.00 a dozen.

Once in a while I make so bold as to run a window. It always pays. I have a large rag-doll which I dress in a gown made entirely of socks. This is very easily done. A nice, white, baby's stocking makes a very nobby stocking-cap.

I bring my garden hose-reel down and place on it a placard, to wit:

WE SELL
HOSE.

Another placard reads:

MEND YOUR WAYS—
NOT YOUR SOCKS.
WE SELL SOCKS.

Get wise, Mr. Pill Man, and try it yourself!

How the Druggist's Sundries Are Made.

FIRST PAPER: CHAMOIS SKINS.

Sheep Instead of Chamois Furnish the Commercial Article Nowadays—How the Skins are Tanned and Cut—The Dyeing and Bleaching Processes—Different Grades on the Market—Display and Care of the Stock, and Other Points of Practical Interest.

By HENRY G. DRUEDING,
President of Drueding Brothers Company, Philadelphia.

In presenting this article I shall endeavor to place before your readers a short, intelligible treatise on chamois skins from an experience in their manufacture and sale reaching over twenty-five years.

The name "chamois skin" is misleading. It originates from the chamois animal, the zoological name being *Rupicapra tragus*. These animals, as is well known, inhabit the

length, when they suddenly curve backward. Its hoofs are admirably adapted for taking advantage of roughnesses or projections on the mountain sides, or on glaciers. The hair is long, thick, and coarse. The illustration, I think, is a good representation of the animal.

The supply of skins from the chamois animal is, indeed, very limited. There would not be a sufficient quantity produced in five years to supply the demand for chamois skins for a single day.

I made inquiries during a recent visit to Switzerland about the probable annual crop of these skins, and learned that five thousand to six thousand skins are about an annual yield.

WHAT THE ACTUAL SKINS ARE.

What is known in the markets of the world as chamois skins is really an oil-tanned, sheep-skin "flesher," or lining, as it is called in England.

The genuine chamois skin, when tanned in oil, is of a very soft and velvety texture, with a very thin epidermis or grain, which is readily removed by "buffing." The skin is also rather heavier than a sheep or lamb skin, which is usually employed for the manufacture of chamois. For all ordinary purposes, however, the oil-tanned sheep or lamb skin "flesher" is just as desirable as the genuine chamois skin.

To manufacture sheep or lamb skins into chamois leather, the first step necessary is to remove the wool, which is done by several methods. The one usually employed now is to paint the flesh side of the skin with a strong solution of sodium sulphite. This will loosen the wool in about twelve hours' time, so that it is easily removed either by pulling it off by hand, or by scraping with a dull instrument. The sodium sulphite is then washed out and the skin immersed in milk or lime to



Henry G. Drueding.

European Alps and Caucasus Mountains, and resemble a goat or deer. They are very shy and difficult to find. Hunters will follow them for days over dangerous mountain passes until they finally bring their prey to bay.

THE CHAMOIS ANIMAL.

The animal is about the size of a goat or deer, of a dark chestnut-brown color, with the exception of the forehead, the sides of the lower joints and the muzzle, which are white. Its horns, rising above the eyes, are black, smooth and straight for two-thirds of their

swell it, and also to remove small particles of wool which still remain. The skin is then put on a beam and the legs and head cut off and otherwise trimmed to make it the proper shape. The head, legs and other trimmings are sold to the gluemaker for making glue. The beamsman also removes all the flesh left on the skin by the poor workmanship of the butcher. After this the hide is ready for the splitting machine.

HOW MADE.

I wish to explain here that what is known in the trade as chamois skin is really only half of the skin. The outside portion—*i.e.*, that part of the skin next to the wool, known as the grain side—is not suitable for chamois leather and is used for other purposes, mostly as pocketbook linings, hat linings, and book bindings.

In former times when skins were prepared for oil tannage, this part of the skin was cut away with a suitable knife and thus lost. To make chamois skins in this manner at the present time would mean at least double the price in the present market. At the present time the skin is cut through the center or split, thus producing two skins from one. The outside, that part of the skin next to the wool, is known as the grain side. The inside is called lining or flesher.

The splitting is accomplished mostly on machines especially constructed for this purpose. It consists of endless knives the edges of which are constantly grinding to keep them sharp, the skin being passed through rollers against the sharp edge of the knives. This machine requires delicate adjustment to produce good results.

THE TANNING PROCESS.

The lining or flesher is now ready for tanning. This is accomplished by sprinkling it with oil; codfish oil of good quality is usually employed. It is very important that this oil should be thoroughly incorporated into the skin. For this purpose a quantity of the skins are placed into what are known as fulling stocks, which twist and turn in every direction and distribute the oil evenly.

After sufficient milling the skins are partly dried and the process of sprinkling, milling and drying is repeated again and again until they are full of oil, and all the moisture is dried out. They are now allowed to hang long enough to oxidize the oil in the skin at

a temperature of about one hundred degrees. The process after this is very simple. The oil is removed by pressure, a hydraulic process, and the remaining portions washed out by saponification with alkali. After this the skins are dried and are ready for finishing.

The oil which is removed from the skins by hydraulic pressure, also that portion of oil which is recovered by decomposing the soap solution with an acid and separating the oil, is used in the manufacture of other leathers, the object being to make the leather pliable, etc.

THE FINISHING.

The finishing is done mostly by pressing the skins against a revolving wheel covered with emery or flint. This removes all adhering substances and forms a finely finished surface.

We now have the finished chamois leather ready for the trimming and sorting room,



The real chamois animal—*Rupicapra tragus*—from which chamois skins are supposed to come.

where it is cut into suitable sizes and packed for the market.

Of late years trimmed skins—*i.e.*, skins of even sizes—are preferred by the trade. For this reason most manufacturers, at least most American manufacturers, cut the skins over a pattern so as to produce uniform sizes. In former years, when England and France supplied the United States market, the skins in the same package would vary in size and shape, thus lacking uniformity.

It is true by cutting uniform sizes there is necessarily some waste, but this is reduced to a minimum, when all pieces are again utilized by making watch bags and other small articles which find a ready sale.

USES OF CHAMOIS.

The principal uses for chamois skins are for

cleaning purposes. They will absorb moisture readily and give a high polish to glass, furniture, and other highly polished surfaces.

A good chamois skin can be used either wet or dry, and dry up soft when washed in soap and water.

Large quantities of chamois skins are also used for chest protectors, chamois vests, and even underclothes are made out of them for cold climates. Chamois skins are also used in the manufacture of many leather goods, such as purses, etc. Ladies use them for fancy work.

Of late years there has been placed on the market quite a quantity of imitation chamois skins to be used for fancy work and other purposes where the skins are not to be washed. These skins are usually produced by tanning the skins in alum and coloring them to imitate the genuine chamois. This will produce a skin looking very much like a chamois and very often having a superior finish to an oil-tanned skin. Care, however, should be used in selling these skins for ordinary purposes for which chamois is used. They will dry up very hard and stiff when washed. In ordinary chamois skins the dealer should order oil-tanned chamois if he desires a skin that is washable.

DIFFERENT KINDS OF COLORS.

Chamois skins can be made in all colors. Formerly colors were mostly produced by applying to the surface of the skins different colored pigments, which adhere to the leather. This produces an unsatisfactory article, however, as it will always dust more or less.

Of late years, however, manufacturers have succeeded in producing fine colors with aniline, which is more satisfactory.

By incorporating a small quantity of ferric oxide, very finely powdered, an excellent polishing chamois is produced for silverware, etc.

A good quality of chamois skin is generally of a yellow or light-yellow color, which, when freshly cut, should show a dark-yellow color inside. This is a characteristic test of oil tannage. The absence of this color is generally an indication that the skin is tanned by a different method.

A good quality of oil-dressed chamois skin should also absorb moisture readily. This test is applied by allowing a few drops of water to fall upon the skin. It should absorb it speedily. If these drops roll about on the

skin without absorption, it is almost a positive indication that it is not oil-tanned.

For some purposes a very light straw-colored chamois is demanded by the trade. These are produced by bleaching with sulphur. The skins, slightly damp, are hung in an air-tight room in which a small quantity of sulphur is burned, producing a light straw-colored product of bright color. It rather weakens the skin, however, and also incorporates some sulphur, which is objectionable when used in connection with silverware.

These bleached goods should not be used for wrapping silverware, as they are apt to tarnish it by producing sulphide.

The market affords a number of different brands of chamois skins. The principal ones are the American goods, the English and the French goods.

THE VARIOUS BRANDS.

The American grade of late years has largely crowded out the imported kind, and is even getting quite a foothold in Europe. Large quantities are now exported, principally to Germany, where they find a ready market. The English goods are generally of good quality and tannage. They come in both colors, yellow and white, the latter being produced by bleaching. They are trimmed and sorted mostly in irregular shapes and sizes; the French goods are mostly of a dark-yellow color, in large sizes. One variety, Bruts, are heavy skins finished on one side only. This is purposely done so that they absorb large quantities of water, thus making them suitable for stable work, automobile washing, etc.

Another variety of the French goods is the double dressed. They also come in large sizes only. They are very similar to the Bruts, with the difference that they are finished on both sides, making them thin like ordinary goods. In the last few years both these varieties, the Bruts and the double-dressed goods, have been produced in the United States in large quantities, and according to the writer's opinion they are equal, if not superior, to the French goods.

The manufacturer usually sorts these skins into three qualities, first quality, second quality, and third quality, and prices are regulated, of course, accordingly. The first quality should be free from stitches, soft and nearly perfect. The second quality consists of hides rejected from the firsts on account of too

much stitching, harsh spots, and other imperfections. The third quality again is composed of "rejects" from the second quality.

The drug trade, for the sake of retaining the public opinion that only the best quality of everything is obtainable in a drug store, should handle only the first quality of goods.

DISPLAYS.

Chamois skins are largely sold by the drug trade. Spring and fall are the best seasons to display them in the stores. A very attractive window display can be made with these goods. Care should be taken, however, when used for this purpose, not to expose to sunlight, as this will very quickly bleach them, and thus render them unsightly. This, however, does not cause the quality to deteriorate in any other way.

A glass case filled with these goods, placed so they can be seen, will keep them clean, and help to remind a woman when she enters the store that a chamois is needed in her household, and will assist materially to help sell the goods. Some druggists will keep them hidden in boxes or drawers, and produce them only when called for, with the inevitable result that their sales will be very limited.

THE CARE OF CHAMOIS.

A good quality of chamois skin when properly used should last a long time, and can, of course, be used wet as well as dry. It is important, however, that chamois be kept clean.

If it is soiled, the best method of cleaning is by washing with soap and water. A liberal supply of soap is always beneficial to the skin that has been stained.

The best method to prevent shrinking is to rinse it in soap-suds before drying. When dry, rubbing and stretching will restore it to its former softness. A good chamois skin cannot be washed in boiling water, as a temperature above 130° or 140° will destroy the skin. The writer has seen skins that were returned to the seller, who in turn sent them back to the manufacturer, that were partly burned to charcoal, evidently caused by drying in strong heat, or by steeping in boiling water. The cause of this is easily seen, as chamois is a gelatinous substance, a sort of oleate of gelatin, and too much heat should be avoided.

HISTORY OF THE CHAMOIS INDUSTRY.

I may add that the manufacture of chamois skins in the United States has been attempted by various sheep leather factories for the past fifty or sixty years with varying success, always resulting in abandonment. The first successful attempt to manufacture this article in a large way in the United States was accomplished by Drueding Brothers of Philadelphia. It was only by persistent efforts that the various difficulties in producing a satisfactory article in competition with cheap foreign labor was accomplished.



The common American sheep, which now actually furnish the "chamois" skins of commerce.

The duty on chamois skins has been only 20 per cent ad valorem for a number of years.

Prior to 1883 practically all the skins consumed in the United States were imported from England and France. At the present

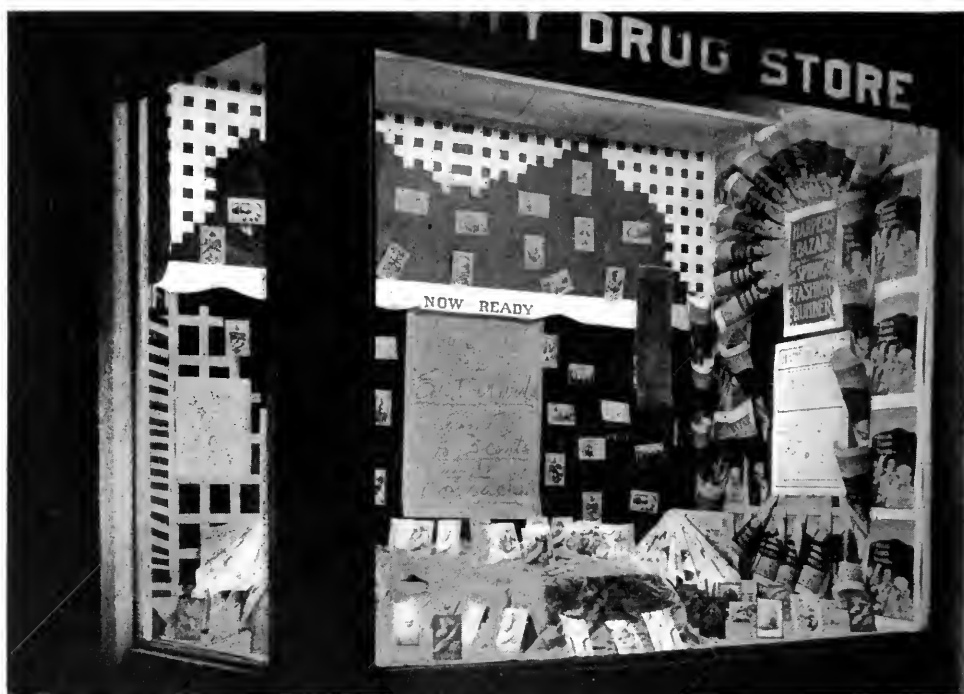
time the importation has dwindled to a very small proportion. It seems, however, that this industry is not widely distributed, there being at the present time only three factories in the United States producing chamois skins.

AN EASTER WINDOW.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Easter is essentially a display time—a season when people give more than usual attention to appearances. So when that holiday arrived last year, I thought I'd give my window a new dress. I arranged a background of red with an ingrain border top. The white latticework was made of heavy cardboard obtained from the printing office. I cut it out with a knife. The design is clearly shown in

was a raised surface formed by setting a heavy high box on the floor of the window and covering it with green, crumpled tissue-paper. Grouped on and around this elevation were post-cards that we had to offer the trade. They were held in place by wire holders. Sign cards told the prices. They were made of plain white wrapping paper, a departure from the stock usually employed for that purpose.



the illustration. Over the red background were arranged post-cards, while over the entire background I hung black cheese-cloth. I often use this where I wish to show articles without seriously obstructing the view of the interior.

The side wall bore a magazine trim which was intended to promote the sale of the Easter number of *Harper's Bazaar*. In the center

Some of the best houses use this kind of paper as an advertising stunt.

The placard in the center of the window, not very well shown in the engraving, read as follows: "Look over our Easter cards. From 2 for 5 cents up to 10 cents each." The whole window presented a pretty appearance, as may be seen from the illustration. And we sold any number of holiday cards.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,
Delhi, N. Y.

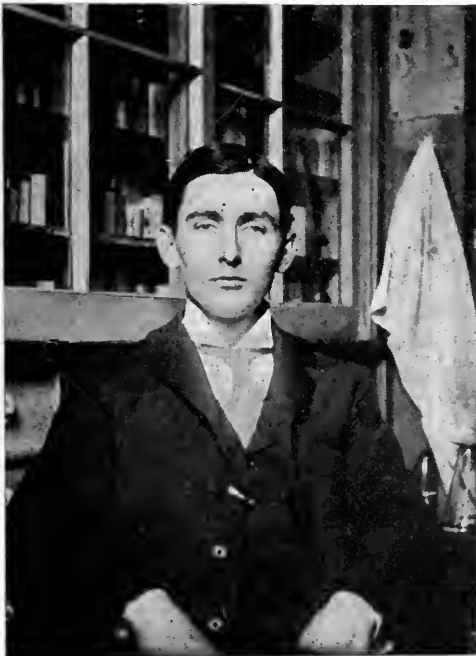
(Continued from February BULLETIN.)

CHAPTER III.

PROFITABLE AND UNPROFITABLE EXPERIMENTS.

If a man never makes any mistakes, he never gets very far.

This is in part because a man who makes no mistakes of his own will never have the advantage of profiting by them nor will he



Snapshot of Mr. Farrington taken behind the prescription desk during the early years of his proprietorship of the store.

be disposed to profit by those of others; and in part because a man who always plays the game so carefully as never to err must necessarily be the kind who will be afraid to branch out and try new methods or seize new opportunities.

I made no end of mistakes and many of them could have been prevented by the exercise of a little foresight, but then it is easy enough after an experience is past to see how it might have been avoided.

TAKEN IN.

One day a man came along with a wagon load of bug-killer of some sort. He demonstrated to my satisfaction that it was the greatest thing ever invented for destroying all forms of insect life. It was put up in handy, squirt-top cans, and he said that if I would buy 3 cases at \$4.00 a case he would give me the exclusive sale of the goods in my town.

I took the goods right off the wagon and gave him my check for the \$12, and \$12 did not grow on every bush in those days either.

He drove out of town, and before noon I discovered that he had sold the goods to one or more other dealers on the same street.

The check was on a bank in Walton, a near-by village. I telephoned and stopped payment. When the man reached that town, as he soon did, and presented the check for payment and it was refused, he simply went to the railway station and got a consignment of his goods that was waiting there, tendering my check in payment for the transportation charges. It was accepted, the difference paid to him, and he went away.

When the check turned up at the bank again in the hands of the express agent it was again refused, and he wrote me for payment. I refused and stated the situation. In due time his lawyer called upon me to accept the check and told me that inasmuch as it had come into the hands of an innocent party it would be up to me to pay it. I found that

*Copyright, 1912, by Frank Farrington.

this was true and I settled. That did not, however, make the bug-killer sell, and in the end I dumped it into the river.

So much for buying goods from an unknown dealer and paying for them before their quality was an assured fact. Such experiences certainly point the way to buying from the house with a reputation.

GETTING INTO THE SODA GAME.

It was about this time that I began to consider the soda fountain proposition.

My warmest competitor had practically the only real soda fountain in town at that time, and it worried me to see all of my customers dropping into his store all through the season to buy soda, and naturally other things as well. A live druggist will not accept such a situation calmly. He cannot afford to give his competitor a chance at his trade every day all summer long.

I began to investigate soda fountains. I



Part of the interior of the Farrington store when the business was young.

found that the good ones ran up into considerable money, much more than they did a few years later. Finally, however, I got track of a second-hand tile fountain of the counter sort. It had been used but one year and I bought it on the instalment plan from what was then the Low Art Tile Co. I paid \$275 for it in easy (?) payments that ran on into the next winter. It was set up in April, and when ready to go stood me in about \$500.

It was an attractive looking affair, really rather artistic, and it added to the appearance of the store. The counter part held ten bottles for the syrups and there were two mineral tubes and one soda draught-tube. The bottles set around the sides on a revolving

nickel rack. The interior was filled with ice that melted so fast that you would have thought it was a fireless cooker.

Well, we finally got it ready to touch off. I sent out little opening invitations to the ladies of the town and enclosed with each one a newly minted five-cent piece. The invitations were well printed on good stock and read like this:

AN INVITATION.

We are starting our soda fountain.
Will you come and help us?

The five cent piece enclosed will buy you a glass of the best soda water you ever drank.

Recognizing the importance of pleasing the feminine taste in such things, we take pleasure in asking you to be among the first of our critics.

FARRINGTON'S DRUG STORE.

The people responded to this plan well and I can recommend it unqualifiedly. But they didn't seem to come more than once or twice. Of course there were a few people who repeated, but for the most part they all drifted back to the other store—and in the light of subsequent experience I can say that the soda water at that store was pretty bad. However, it was better than mine at first.

I had followed directions too closely in making up my syrups and they were too thin. They didn't have the flavor, and as soon as we had a few really hot days they would sour on the rack and in the cellar or anywhere else.

It didn't take me long to get wise, and I improved the goods until I knew we were drawing soda water as good as any one could under the circumstances. The business began to grow a little. We did a great many things to increase it.

Among other plans was one to enable us to take out ice-cold glasses in which to serve the soda. I remembered getting a glass of something or other at a fountain in Lowell, Mass., once upon a time when the glass was so cold that I couldn't hold it in my hand or drink it either. I wanted to hand them out like that.

I had the boy build a box to fit under the counter. He made the walls double with paper between, and we put the glasses in the top and ice in the bottom and waited for the former to cool. But they came out about as warm as they went in, until I happened to think that cold air falls instead of rising, and put the ice at the top. Then we got results.

Ours was a very poor soda-water town, and our location was on the hot side of the street at the time of day when most of the people came out. We had not room for anything more than uncomfortable stools, and I was somewhat handicapped.

I started ice-cream soda at 10 cents, but a third fountain starting up made it necessary to cut the price to 5 cents to meet the rest. However, I maintained the quality, and the fountain began to do us some good in the way of getting new customers and holding the old ones. It was a good thing for the store aside from its own advantages as a money-maker, the latter being rather questionable.

We had some difficulty in keeping the class of soda trade down to a desirable element. There was a tendency on the part of some of the boys to try to "rough-house" the place once in a while. It was just a case of youngsters out to have a good time, but the best class of trade is easily driven away by anything of that sort, and we were called upon to exercise all the tact available to keep matters properly adjusted. On one occasion a young fellow came in with a rush, slammed himself down on one of the stools, and taking hold of the rack full of bottles, gave it such a whirl that half the bottles flew off at a tangent and distributed broken glass and syrups all over the floor and counters.

After two years of soda-water trade, I decided to find out just how much money it was making for me. The third year I kept track of every outgoing and incoming penny connected with it.

When I closed up the season (which I will admit had been a very cool one even for our climate) I found that my net profit on the soda business amounted to exactly nine cents!

OUT WENT THE FOUNTAIN!

It did not take me fifteen minutes to decide what to do. I was getting a good deal better trade by then. My sales that year were \$9000, and I said to myself, "I can afford to get along without that fountain. If it could be made to do business enough to pay for one man's time on it, I'd keep it. It can't though, so out she goes. I'll bear on hard on some other things to take its place in getting people into the store, and as for the nine cents profit, I'll make that up on the first prescription that comes in."

I sold the fountain for \$75, all but the three ten-gallon tanks, and those I sold for \$50. If I were to-day running a drug store with a view to making it develop all the business possible, I would have as good a soda fountain in it as I could afford, and I would make it pay me more than nine cents a year too.

With that \$125 I bought three floor show-cases for one side of the store, two 8-ft. cases, and one 5-ft. cigar case. These were ahead of any in town and gave the store an appearance which, together with a complete redecorating, made things look prosperous and showed the goods and sold them.

OTHER VENTURES.

With post-cards coming strongly into use at that time I made a big effort to get high-class view cards, and I sold everything for one cent. This brought in more people than the soda fountain ever did, and in spite of the one-cent rate for cards, some of which cost as high as \$2.50 per 100, it paid a good net profit.

With a new cigar case I decided also to go after the cigar trade, as we had not been getting our share of it.

I began by closing out at any price such

Keeps Drinks Hot or Cold

This is good for fishing excursions

The Caloris bottle is a glass bottle in a nickel jacket.

It holds a pint or a quart of liquid and if you put it in hot it will stay hot for 30 hours, just as hot as when you put it in.

If you put it in cold it will stay that cold for 60 hours.

Fix up your hot coffee or cocoa for the trip, put it in the bottle and take it with you. If you want an ice cold drink, make it cold and fill the bottle.

These bottles come in several styles and in two sizes. The prices are from \$3.00 up.

We will be glad to show these bottles to anyone interested and explain how they work.

FARRINGTON'S DRUG STORE

A GOOD HAIR BRUSH

It helps make the hair beautiful

If you want fine hair, brush it.

Brush it with a good brush. Don't use a cheap brush with fibre instead of bristles and bristles coming out every time it's used.

Get a good brush and one with the right kind of bristles for your hair.

If your hair is thin don't get the stiffest bristles and scrape the scalp with them. Get long fine bristles and brush the hair.

We sell good brushes from 50c up; and brushes from 25c up. We can give you good value in a 25c brush, but not first class quality.

We guarantee all brushes from 50c up not to shed their bristles. We recommend the highest priced brush you can afford to buy as being the cheapest in the end.

If you pay 50c or more for the brush we guarantee the bristles not to come out.

We sell all the good hair tonic too.

FARRINGTON'S DRUG STORE

USES OF PEROXIDE

A good peroxide of hydrogen is a life-saver

For all sorts of wounds, cuts and scratches, use peroxide of hydrogen as soon as possible to cleanse the wound and you will find that it will heal up much more quickly and you will avoid the possibility of blood poisoning or lock-jaw.

Keep a bottle always on hand for accidents.

Peroxide is valuable for chronic sores. It is good for insect stings and bites. It is a first class dentifrice for cleansing and preserving and whitening the teeth.

Use it in manicuring the nails, in cases of too profuse perspiration, for scalds and burns, for sore throat, catarrh, colds, etc.

But get a pure article such as we sell. Our price on first class peroxide is 15c for a 4 ounce bottle and 50c for a pint bottle.

FARRINGTON'S DRUG STORE

brands as were not desirable because of quality or unsalability. Then I put in a number of well-known brands and a few new ones of which I secured the exclusive sale.

I did not try to advertise these goods in the newspapers much. It wastes a good deal of circulation to advertise cigars in the newspaper for a retail drug store. The paper charges a rate in accordance with its whole circulation, and only a small proportion of it is made up of smokers.

One successful little cigar introducing plan was the following:

By using a lineograph to reproduce handwriting in duplicate I sent to a list of the local smokers a series of communications. The first was a postal card reading simply, in the best imitation I could make of feminine chirography, "Come and find your Sally." This was followed a few days later by another reading, "I'm waiting for you. (signed) Sally." The last of the series was on delicate note paper in a very feminine looking envelope and on the first page it read:

I've sent you two postals and I haven't seen you yet. Aren't you a little slow? It you should ever see me you'd be mighty fond of me in a short time.

I'm waiting for you at Farrington's Drug Store. Ask the man there for me.

Yours,

SALLY WARD.

[OVER]

On the next page was an imprint with a rubber stamp, "Sally Ward, the best 5-cent cigar, 6 for 25 cents."

There were one or two men who said that their wives were inclined to make a fuss over the first two communications, but no divorces resulted and the cigar had a good sale.

INTERESTING THE SCHOOLCHILDREN.

Other schemes that I used at this time for interesting the schoolchildren in the store were prize plans. In one of them I sent out to all families having children of school age small blotters with an outlined picture on the back, and I offered prizes for the best returned blotters with the pictures colored up with crayons. In another plan I offered a series of 25 prizes, the last 15 of which were only 5-cent tablets, for the best description by a student, of the happenings of a day at school. The only condition was that the matter be written on 8 by 10 inch paper, and in paren-

theses it was stated that we sold such paper in 5- and 10-cent tablets.

Both of these competitions brought in a great many entries and they started the school-children coming our way.

The advertisements reproduced in connection with this chapter show the style that I was following at this time with 5-inch double-

Some Good Vanilla

Who wants any other kind of vanilla?

There is a vast difference in extract of vanilla nowadays.

Some of it never saw a vanilla bean.

We know that we have a vanilla extract that will suit you. We sell it in bulk at 10c an ounce, 6 ounces for 50c.

Bring in your bottle or we'll furnish a bottle without charge.

We guarantee this vanilla absolutely. If you do not like it, we will give you back your money and no questions asked.

A peppermint essence that is just as good we sell for 5c an ounce.

FARRINGTON'S DRUG STORE

Another one of Mr. Farrington's newspaper ads.

column space. These ads. were very widely read, and they certainly produced results. I secured a prominent position in the local weekly papers and paid about nine cents an inch.

Once in a while I ran something very different in the way of copy. In advertising candy one time I used the following. Candy advertising in the newspaper must be very catchy in order to get much attention:

Once upon a Time there was a young Fellow and He lived in a Town about like Delhi. There were Many young Fellows in the Town, and They had a Way of giving the Girls a pretty good Time. But hard Times came and Cash was scarce. So this young Fellow thought He would save Money by giving the Girls Candy that cost Less. He bought the Kind that is all fancy Box. It looked Great on the Outside. He gave all the Girls a Box. He thought he would be Popular. The Girls all said "Oh my!" when They saw it, but when They ate it They said "Oh Me!" It tasted something Fierce. When this young Fellow came again he got the Frosty Mitt (whatever That may be), and He found the Girls starting out skating with the other Boys. He had saved a few Cents on the Candy, but He had lost his Prestige, and That is a bad Thing to lose. He felt all Cut up. He thought it

over, then He borrowed some Cash and bought each Girl a box of Huyler's and had Them sent around to their Houses. After a few Days he went to call, and instead of the Frosty Mitt, he received the Glad, Hand "and then Some," and now He has Prestige enough to fill a Barn. Moral: Get the best. Get Huyler's. Get it at

FARRINGTON'S DRUG STORE.

In the next chapter I am going to tell all about the advertising I used at one time and another to get business for special days and occasions, like Christmas, New Years, Easter, etc., etc.

All such days or events bring chances for increased sales, and the reason more druggists do not get their share of the extra business is simply because they do not go after it.

With better sales and more money and better help in the store I was able to do better advertising. Of course I could not give the customers the personal attention they got in the earlier days, but I never did believe in cheap help and I preferred to pay good wages for a good man rather than take a poor man or boy at any figure.

(To be continued in April.)

A NEWS BULLETIN BOARD IN FRONT OF THE STORE.

Brenan & Wilson, of Cambridge, Ohio, Obtain Telegraphic Press Reports Four Times a Day and Feature Them on the Sidewalk—Store Ads. are Worked in, Too, and the Scheme Has Proved a Remarkable Success.

By SAMUEL SCHLUP, Ph.G.

I have read for a number of years the interesting articles in the BULLETIN under the head of "My Best Advertising Scheme." Let me tell you of a scheme we have been using for



Samuel Schlup.

the past six months and which has brought good results as a live one!

We have arrangements made with the leading daily newspaper of the city by which it

supplies us with large news bulletin blanks bearing its title on top—"The Jeffersonian Bulletin." At four different periods of the day this paper receives wire news from the United Press system. These they 'phone us in brief form and we immediately place them on the bulletin board in front of the store. Thus we supply the people with the latest, livest and best news service of the city.

AN ATTRACTIVE AD.

This attracts wide-spread interest and attention and is one of the most popular and sought after things by the people whenever they are up town. They learn to call the store by 'phone asking about the returns of an election, the results of a ball game, or the truth about a local story which has broken loose. It has become so popular that any one hearing a piece of news will 'phone the store so that it can be placed on the bulletin board. In this manner our telephone number is remembered by the majority of the people. Many traveling men that "make" the store are so interested in this form of advertising and its complete success that if they hear any news of interest while on their route, they 'phone or wire us at once.

Directly below the news itself on the bulletin, and without any space between, we always have what we call a store bulletin with the headline, "Brenan & Wilson's Special Bul-

letin." On this we use clippings from late magazine advertisements of the drugs and sundries which we carry in stock, and straight "dope" to the people of what is doing in the store. We try to make our ads. "carry" to the minds of readers so they will not be forgotten, and we draw them up in a catchy manner so as to make them amusing and pleasing. For example, when the show "Alma, Where Do You Live?" visited our city we used the following on the bulletin board:

BULLETIN.

Alma, Where Do You Live? He
Wants To Send You a Box of Liggett's
Chocolates.

Many merchants in other lines, as well as the local theater managers, have tried to buy this space below the regular news bulletin, but it is not for sale.

Seasonable drugs are mentioned on this space each day, as well as new drugs and sundries which we get in stock or wish to push. At certain times during the day, the street in front of the bulletin board becomes almost blockaded. People say, "Well, let's see what's on the bulletin."

Since the installation of the bulletin, we find that it has done more good than newspaper ads. or house-to-house distribution. It puts the article before the people right at the place where they can procure it, and that is what brings results!

"MY MOST EXCITING EXPERIENCE."

**Dispensing Oxalic Acid Instead of Boric—Severe Burns from Nitric Acid Narrowly Averted—
—Misunderstanding a Foreigner Proves Embarrassing—Several Attempts at Suicide—
One Man Swallows an Ounce of Veronal, Another Takes Arsenic, while a
Third Fellow Drinks Laudanum—Some Very Trying
Situations for a Druggist.**

A CASE OF MISTAKEN IDENTITY.

BY FRANK GLANDO, OAKLAND, CAL.

The following story will demonstrate how near I came to getting into trouble, and goes to show that there is a God, too, for drug clerks. It also proves the strict necessity of always looking twice at the labels of bottles and the jars of drugs used.

A long time ago I had occasion to make a gallon of boric acid solution, which we always keep on hand. So I got the jar of boric acid crystals, and was cocksure I had it. Being quite familiar with the store, I merely glanced sideways at the jar, and noticing the word acid, weighed out 6 ounces of the crystals, which superficially looked about the same as boric acid. I placed the salt in an enamel saucepan with water, boiled it, and filtered the solution into a gallon bottle.

The next day I had occasion to use the pan for an infusion. To my great surprise I noticed that the enamel inside was practically all corroded. The bottom was burned out, exposing the iron.

Suddenly a thought flashed to my mind. I ran to see the stock jar of what I had used, and to my great astonishment I found out I had made a solution of oxalic instead of boric acid.

I reached for the gallon bottle of the solution I had made. Here again I was terrified to see about a pint of the solution gone. You can imagine how I felt. My hair stood up straight. I had cold and hot perspiration alternately, and my legs felt as if I had run a marathon race. I had visions of some poor devil washing his eyes with oxalic acid solution, and was thinking how soon it would be before I would be working in the jute mill. Anyway, it was time for action.

I dumped out the oxalic solution into the sink and immediately made a gallon of boric acid solution. This time I looked at the label three times, and then looked at it again. Next I telephoned to the other clerk who had the night shift, as I thought nobody but him had dispensed the solution. I found that he had filled a prescription from Dr. B., an eye spe-

cialist, together with some eye drops for a Mr. A. The medicines, he said, were all ready and wrapped up and paid for, but the customer would not call till the following evening. The package, he added, lay in the corner of a showcase.

Well, you should have heard the yell I let out as I hung up the receiver. I made for that package in a hustle and changed the bottle. Maybe I wasn't happy! Believe me, "never again."

I may add, however, that I would never have made such a blunder if the apprentice in the store had not changed the stock bottles of these acids while he was cleaning them.

But always look again, anyhow!

AN OUNCE OF VERONAL PROVES FATAL.

By W. A. L. WILLIAMS, ADELAIDE, SOUTH AUSTRALIA.

This experience may not appear so appalling in cold type, but I assure you it was exciting to me.

About ten o'clock one morning, a man walked into the shop and asked for a hypodermic tablet of morphine, $\frac{1}{4}$ grain, for sleeplessness. I refused. Then he asked for veronal, saying he had used it before. I complied, and as he said he was traveling, handed him an original ounce packet. He also asked for something for his nerves. I gave him a bromide mixture.

The next morning I was called in to interview a constable, who, after carefully unwrapping a parcel, produced my bottle and the empty veronal packet. There was nothing to do but admit the sale. Then I was informed that my customer was lying dead in a certain coffee palace.

These words cannot describe my feelings. I managed to secure a portion of the medicine which still remained, and after a rapid analysis assured myself there was not a mistake in the mixture. I was then conducted to the coffee palace to view the deceased, who was still lying partly dressed on his bed. I did not derive an immense amount of pleasure from that, however. Then followed a summons and the inquest, during which I was cross-examined as to contents of the bottle and various details of the sale, the questions not conducing to a very happy frame of mind for the witness. It transpired that the man had taken the whole

ounce of veronal at a dose, and death was due to poisoning by the drug.

Requests for veronal I now treat with the strictest caution.

A WHARF LABORER SWALLOWS ARSENIC.

By CHARLES PALLISER, WELLINGTON, N. Z.

Over a year ago I had a very lively time. It was just after midday. Several workmen were passing homewards, the neighboring schools were just out and the children were going by in groups. A man came in and asked for some arsenic, saying he wanted to kill some cats. We offered to let him have Prussic acid, but he demanded arsenic. He brought a witness with him, and the pair signed the necessary poison-sale sheet. On handing him the arsenic, which we had dispensed in two cachets of 10 grains each, I was astonished to see him deliberately put one into his mouth and swallow it.

In less time than it takes to write it an emetic was administered. A group quickly gathered at seeing me struggling with the big, burly wharf laborer. Among the interested spectators appeared a medical man, who then took charge of the case and sent the patient off to the hospital. Police authorities were in for statements in case of death, but it happened none were necessary. By the free use of a stomach pump the man regained consciousness that evening.

I have sold arsenic since then, but always take any amount of precautions!

A WOULD-BE SUICIDE.

By S. L. McDOWELL, CAMDEN, ALABAMA.

About six months ago I came into the store after dinner and started to straighten up things. In a few minutes Dr. Bonner, the proprietor, entered and told me that he was going down the street a few minutes, and if anybody wanted him to let him know.

Just after he left, a man, who was somewhat drunk, came in and said: "Say, son, have you any laudanum?" "Yes," said I. "Let me have a ten-cent bottle, and pull the stopper out so that I can take a dose."

I did as he asked me, and when I handed him the bottle he put it to his mouth and

drank the whole contents. "Are you crazy?" I cried, "or are you trying to commit suicide?" He said it would not hurt him in the least. He also told me that he was feeling badly and was going back to the hotel, a quarter of a mile from our store, to retire.

About five minutes after he reached the hotel, our telephone bell gave a quick, loud ring. I put the receiver to my ear, but before I could say hello a boy at the hotel asked me whether Dr. Bonner was in. I said no, but added that I could get him in a minute if he wanted him. Then he told me to tell him to come to the hotel at once as a man was up there about to die.

I closed the store and ran down the street as hard as I could to get Dr. Bonner. When I told him who wanted him and what he had drunk, he grabbed his saddlebags, jumped on his horse, and hurried to the hotel just as fast as he could.

I closed up the store and hastened to the hotel also. I got there in time to help Dr. Bonner some. After a great deal of work we brought Mr. Blank to, the very man who had drunk the laudanum.

A MISHAP WITH NITRIC ACID.

By JOHN A. KENNEDY, RIDGETOWN, ONTARIO.

Recently an accident happened which I am not likely to forget.

It was late on Saturday night, and since only a few customers were dropping in, the boss took advantage of this to slip out for a few minutes. During his absence a man, a stranger to me, came in and asked for half an ounce of nitric acid and handed me a bottle to put it in.

He was a man who seemed to know more or less about drugs, and was going to use this acid to make up an ointment which appeared to me would be quite similar to citrine ointment. Judging from what he said, it would cure nearly everything on earth where an ointment could be applied, from sore eyes to a bog spavin.

I filled his bottle, and after corking it well commenced removing the acid-eaten label with my jack-knife to replace it with a new one. While I was scratching away, and at the same time talking to my customer, the bottle broke,

and the contents were thrown in my face, particularly in one eye. I had had a bottle break in my hands before while putting in the cork, but this was entirely new to me.

In about five seconds, if I remember right, many things flashed through my mind, and I must acknowledge I never used my brain so quickly in all my life as I did then. Books with all their instruction as how to counteract an acid were of no value to me. It was up to me to think. The lime-water bottle was a little ways from me, and the contents of this I poured into my eye, never for once thinking of the cost of the article, until I didn't know which hurt the most, the lime-water or the acid.

Then I put aqua ammonia on my face until the fumes nearly suffocated me, as I thought this would be the better of the two; but I didn't dare to put it in my eye. It did the work well. Although I had a bad looking eye and a slightly burnt face, I came out fine with the advice of the doctor later.

Everything is well that ends well, but the proverb is of little encouragement to an imperiled man who doesn't know how things are likely to end. I would rather not go through the same experience again.

HAIR TONIC FOR THE NERVES.

By C. H. MONAHAN, NEW ROCHELLE, N. Y.

A girl came into the store in which I am employed and obtained a bottle of toilet water. She also asked me for a good tonic for her head. She could not talk good English, being a foreigner, so she pointed to the top of her head and put her hand on it, and I thought she wanted a good hair tonic.

I tried to explain to her how to use it and gave it to her with much satisfaction, thinking nothing more about it until the next day, when her madam called up on the telephone and said the girl wanted a good tonic for her nerves and had taken a large tablespoonful of the hair tonic I had given her.

As the preparation was of a proprietary nature, I did not know what to give as an antidote, so I told her to ask the girl whether she felt any bad effects. She said no; so I told her I guessed it would cure her nerves all right, but advised that she take no more of it.

DOLLAR IDEAS

A DEVICE FOR HANDLING BARRELS.

J. C. Reese, Newton, Kansas: The accompanying etchings illustrate a very useful home-made device to be used for raising a heavy barrel and keeping it elevated sufficiently to al-

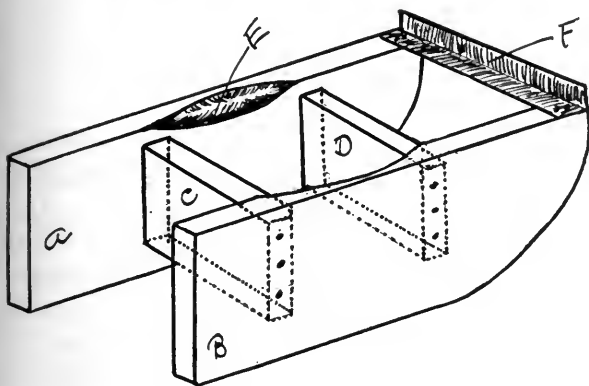


PLATE I

This etching shows the construction of the lifter.

low a gallon measure to be inserted under the faucet. I have used several of the lifters for some time and would not be without them. The measurements are as follows:

Rockers A and B are 2 by 12 by 33 inches.

Cross-beams C and D are 2 by 8 by 13 $\frac{3}{4}$ inches.

Cavity E is a hollow place cut out to fit the barrel.

Projection F is a heavy piece of iron bent at

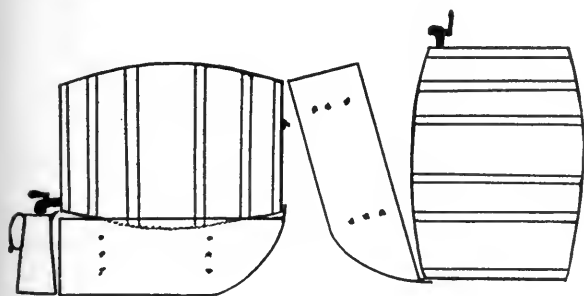


PLATE 2.

On the right will be seen the lifter in action; on the left, at rest.

right angles. It is 2 inches wide where the screws go through and 3 inches high.

Plate No. 2 shows the method of raising the barrel and the position after it is raised. To lower the barrel on to the "sled," the man stands facing the faucet with the lifter directly in front of him, the right hand on the faucet

and the left hand on the raiser. He inserts the flange under the barrel and pulls with the right hand. The barrel tips easily.

A QUICK METHOD OF MAKING ELIXIR OF TERPIN HYDRATE.

J. C. Arthur St. James, Fort Morgan, Colo.: Having occasional orders for elixir of terpin hydrate and heroin N. F. in gallon quantities, I always found dissolving the terpin hydrate in the alcohol a very slow process, tables of solubility to the contrary notwithstanding.

At first it was found that heating the alcohol and the terpin hydrate in a flask was quicker. But this was more or less dangerous, besides entailing waste of alcohol. So it occurred to me to take advantage of the low melting point of terpin hydrate, by dissolving it in hot glycerin. The idea worked better than expected. I now take about one-fourth of the amount of glycerin, heat it in a shallow dish to about 100° C., then quickly stir in the terpin hydrate, which dissolves at once. The balance of the glycerin is added, which, though cold, does not cause the least separation. The alcohol and other ingredients are then added in accordance with the formula. The entire operation, apart from heating the glycerin, does not take five minutes.

I make one change also in the official proportions. I use exactly equal parts of alcohol and glycerin and have found that in the coldest weather not the least separation of terpin hydrate takes place. It is best to specify *powdered* terpin hydrate, which comes in a fluffy, light form, in preference to the crystals usually sent. The powder dissolves much more quickly. This suggestion of course applies to all of the N. F. elixirs of terpin hydrate.

FILLING NARROW-NECKED BOTTLES IN THE COLD.

Nicholas Fox, Ph.C., Spalding, Nebraska: In filling narrow-necked bottles in cold weather with a heavy, thick liquid, the neck of the bottle has a tendency to close, causing waste and loss of time. This trouble can easily be prevented by holding the neck of the bottle to be filled in the flame of an alcohol lamp for a short time. Don't use a match. It smokes the bottle.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THREE USEFUL SUGGESTIONS.

To the Editors:

I am not going to tire you by offering a new way of preparing salvarsan solution. But the suggestion I am presenting may be the means of saving some one money and annoyance.

LOOK OUT FOR TROUBLE WITH SALVARSAN!

On page 38 in the advertising section of the BULLETIN OF PHARMACY for December appears a warning, "Goods offered from Canada or England are not licensed for resale in the United States." Some dispensers do not pay enough attention to little things, and do not know whether their jobbers are supplying salvarsan obtained from Victor Koechl & Co. with their label and guarantee.

Lately there have been many complaints and requests for refunds on salvarsan, the product yielding a green solution under the most aseptic conditions. Knowing that the product is faulty, you are surely unable to take issue with the physician. This is why you should test the product before it goes out.

After the faulty product has left your store, the chances are that you will encounter some inconveniences and delays before you will be reimbursed. You will need to seek a letter from the busy physician and from the wholesalers. After all, suppose your product was not legitimate? Do you not think this a much easier and wiser course, namely, when you receive your tubes from the jobber to dip them in a solution of 1 to 1000 or 1 to 2000 mercuric chloride? Then by a close examination you will be able to see whether the tubes are defective. Flaws are indicated by the appearance of the greenish-yellow coloration around those unaccountable, pernicious and very minute perforations which have proved one source of my trouble. By returning such tubes to the jobber immediately trouble is prevented.

AS TO CHEWING GUM.

Nearly every one has a fad of some kind. Mine seems to be that of noticing little things

too frequently overlooked. I have been very much impressed by the amount of chewing gum sold at the cashier's stand in restaurants and at soda fountains by merely breaking the packages into individually wrapped pieces and displaying them in a large bowl with a neatly lettered card: "One cent apiece." As the bowl is under the observation of the cashier, many steps are saved others. At the same time it affords an effective way of collecting pennies, and in the case of stores serves as a means of catching the odd cents returned to the customer in change.

IMPROVISED VACCINATION SHIELDS.

The thick, square, aseptic bunion pads will serve for vaccination shields, answering the purpose admirably. Furthermore, they are very economical, especially in large, poor families, and when the physician does the work at his own expense.

JOSEPH HART.

Portland, Oregon.

CATCHING AN OVERDOSE OF DIGITALIS.

To the Editors:

This incident being extremely unique, and my feelings somewhat aroused thereby, I thought I would give vent to the resentment that rages within me every time I think of the subject by writing you.

A few days ago we received the following prescription from a physician who makes the treatment of foot troubles his specialty:

Potassium citrate.....	5 drachms.
Potassium acetate	5 drachms.
Sodium phosphate	5 drachms.
Tincture of hyoscyamus.....	2 drachms.
Fluidextract of digitalis,	
Fluidextract of uva ursi, aa q. s.	
to make.....	4 ounces.

Sig: 1 drachm every three hours.

The physician was called upon the phone, and the following dialogue between him and me took place:

"Hello, Doctor, we have one of your prescriptions calling for fluidextract of digitalis. I was taught that the average dose of fluidextract of digitalis was only one single minim."

To which he relied, "Are you sure? I think you are mistaken."

"Pardon me, Doctor, perhaps you refer to the infusion of digitalis. That can be administered in two-drachm doses."

"Oh, well, then. Thank you. Put that in instead."

This goes to show that physicians should leave dispensing to those who are most capable and fitted to do that special work. If this doctor did his own dispensing, and did not have a pharmacist to act as his safety brake, his patient would now be crossing the River Jordan.

SAMUEL H. FRITZ, Ph.G.

Cleveland, Ohio.

HOW HE LOOKS!

To the Editors:

The enclosed picture will show you how we look when reading the BULLETIN OF PHARMACY—a journal which we enjoy very much. This shows the prescription clerk, Mr. Frank



Blakely, taking his monthly intellectual diversion at the desk back in the prescription department.

SAM H. ZIMMERMAN.

Lodi, Cal.

APERIENT WATER IN THE WINDOW.

To the Editors:

Maybe you can use the following to help out some other drug clerk who is "up against it" when he wants something that will attract the people's attention and open their purses. It worked fine for me.

First I filled the bottom of my window about one inch deep with dirt out of our back yard.

I made two mounds in the center to represent two graves. I used heavy white cardboard to represent the headstones and printed thereon:

MARY
beloved wife
of
JOHN SMITH
Born Feb. 30, 1820.
Died April 31, 1891.
Here lies me and my daughter,
Never heard of Pluto Water,
So we stuck to Epsom Salts
And here we lie in these cold
vaults.

SUSAN
daughter
of
MARY and JOHN SMITH
Born Sept. 31, 1857.
Died Feb. 29, 1891.
Rest in Peace.

A small display of Pluto Water appeared in the two back corners with price tag.

This display sold Pluto Water, and that window was the talk of the town for a month after I changed it. Even a year later people still mention it when they buy Pluto—say they want "the kind that keeps them out of the graveyard."

I always watch for the BULLETIN, because I always find something new that helps me out every month.

C. E. PETTYJOHN, Ph.G.

Farmington, Ill.

DEALING WITH INSURANCE ADJUSTERS.

To the Editors:

The adjustment of insurance following the recent drug-store fires in North Dakota made it plain to me that the average country druggist is not very well equipped to deal with the insurance adjuster in such matters.

It seems to be the common error of the druggist who loses his stock by fire, when asked about his gross profits, to name altogether too low a figure. Consequently he does not get sufficient pay for the amount of stock lost. In this connection I might give you a plan which I have suggested to one or two of my customers who have recently started in business, namely, that on each Saturday they keep a record of every article sold with the cost and selling price in order to establish a basis from which to figure.

Of course, this will be of very little inter-

est to the larger firms who keep a complete set of books, but it is a fact that a great majority of the country druggists do not keep a set of books that will furnish any information in a case of this kind. I simply offer this as a suggestion.

P. M. GRICE.

Fargo, N. D.

A HUNTING TROPHY.

To the Editors:

I am sending you a snapshot showing the trophy of my 1911 moose hunting trip. This is one of the handsomest heads I ever saw, although not at all in the "record class" for spread, which is $42\frac{1}{2}$ inches. But the blades are turned up very sharply with a very handsome curve, 18 points, pan $11\frac{1}{2}$ inches wide. The scalp is the blackest I ever saw, and the antlers are of a dark mahogany hue. Altogether it is simply a beauty, and I am very



proud of it, although it is only one of quite a number I have shot. But it is the *best*, probably the best I will ever get a shot at. I thought some of the BULLETIN readers might care to see how a knight of the mortar spends his holidays. I'm quite as handy with the rifle as with the pestle.

The photograph reproduced in the illustration is amateur work and is done with a camera which is part of my woods equipment.

Bridgetown, N. S.

W. A. WARREN.

DESCRIBING A DRUG-STORE DOG.

To the Editors:

Down in this neck of the woods the other day a little girl saw a Dachshund in a drug store. She had never seen this particular va-

riety of the dog species before, and she was very much astonished and captivated by it. Returning home she began to relate her experience with a good deal of enthusiasm to her mother. The mother didn't get a very clear idea at first of what sort of a dog her little daughter had seen, and she asked her how big it was. "Why, mama," said the youngster, after hesitating a moment to clarify her thoughts, "it was just about two dogs long and half a dog high!"

W. N. THAYER.

Brooklyn, N. Y.

SIMPLE METHOD OF MAKING PRICE CARDS.

To the Editors:

Here is an idea which has saved me quite a little money and time. For making price tags I use a calendar, preferably one with large figures for each date. Instead of throwing such calendars away, I save them, and with a piece of carbon paper trace the figures on cardboard, then fill in with outlines with any color of ink I may desire. Any one who can't print will find this simple device quite useful.

These price cards play quite an important part in the window and may be used on post-card racks.

LUTHER E. MCNEILL.

Wilmington, Del.

WHAT WOULD YOU CHARGE?

To the Editors:

What would be charged for the following prescription according to the N. A. R. D. price system?

Strychnine sulphate	$\frac{3}{4}$ grain.
Extract of aloin.....	8 grains.
Extract of belladonna.....	6 grains.
Extract of cascara.....	24 grains.

Make 48 pills.

FORD.

[NOTE BY THE EDITORS.—It may be interesting to have our readers say what price they think ought to be made on this prescription. Let us hear from you.]

WE ARE QUITE ENCOURAGED!

To the Editors:

I read your editorial in the January BULLETIN on "None so blind as those who won't see," and, as they say, it struck me in the right place. I have decided to close at 8 o'clock in the evening as soon as the post-office closes—for it is here in the store. As to Sunday clos-

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

The New York Telephone Controversy.—

The fight waxes hot between the New York Telephone Co. and the pharmacists in that State. The druggists are taking a firm stand against the reduction in their commissions and have the support of the people

Drug Store 'Phones To Go Out To-morrow

Buffalo druggists are circulating a petition to be presented to the Public Service Commission as a protest against the new rule of the New York Telephone Company under which the slot machine in drug stores will be discontinued to-morrow. The company, in accordance with its general system now in effect throughout its territory, will allow agents holding the slot machines to collect only 10 per cent of the gross receipts. The druggists claim that this will not allow them enough to pay the cost of keeping a booth in their stores. The company claims that it must maintain equal rates for all agents or else suffer under the penalties laid down by the Public Service Commission.

To Our Patrons:

This news item plainly speaks for itself.

The New York Telephone Company has seen fit to remove our telephone because we would not submit to a reduction

in our commission from them.

But we are by no means out of business—we would be pleased to fill any orders over the Federal or Frontier telephones, or we will send our messenger to your home for your orders.

Yours Sincerely,

GAUGER & BRECKON

in their conflict. Gauger & Breckon, 351 Potomac Avenue, Buffalo, in their store paper recently devoted a whole page to the telephone controversy. The ad., as may be seen from the accompanying reproduction, was intended to enlist the support of the reading public.

An Ingenious Newspaper Ad.—

Dressed in the form of an ordinary news item there appeared a short time ago in the *Atchison Daily Globe* a drug-store ad. It had been inserted by Matt Noll, of Atchison, Kansas, and was run single column among the general reading matter. Whether it came in for more attention than a display ad. is a matter of speculation. Here it is at any rate:

A COLLECTION OF IMPORTANT PARAGRAPHS FOR YOUR CONSIDERATION.

Get the old idea out of your head that you must take your prescriptions to the Drug Store whose name appears on your doctor's blank. Pick your own druggist with the same care you

pick your doctor. Isn't this common sense? When the doctor prescribes certain medicines he expects them to give certain results; to get these results the druggist that fills your prescriptions must not merely know how to put a little of this and a little of that together, but must have the knowledge and experience to read the doctor's prescription correctly. If you tell your doctor that Mr. — is my druggist and the doctor knows the druggist mentioned is all right, he (the doctor) should have no kick coming.

Matt Noll's Drug Store has now filled 190,000 prescriptions, and every one has been filled by a man who knows drugs. Mr. Noll keeps no others. Prescriptions are filled with care, accuracy and knowledge when they come from Noll's, and for this reason we feel you will not make a mistake in picking out this store to get your medicine. We have yet to see the doctor's prescription we can't fill. True, we perhaps do not carry every drug in the world, but if it's a rare drug we can get it. Just tell your doctor you want to take your prescription to Noll's, or see to it that he leaves them there, and we are not afraid of his criticisms. For we know how to fill prescriptions, and no guesswork goes here. We do not overcharge for prescription work. See that M. Noll, the Man Who Knows Drugs, fills your prescriptions. Then feel Safe.

An Artistic Calendar.—

An unusually pretty calendar was distributed this year by Spotts & Post, of Le Mars, Iowa. The store picture seen at the top was the original photograph pasted on a heavy corrugated cardboard of chocolate



color. A very light tan border, suspended loosely from the bow cord at the top, served to bring out conspicuously the picture of the pharmacy. At the bottom was a 1912 calendar bearing a cover done in colors. The whole design was in very good taste.

Skin-deep Beauty.—

The ordinary coloring in birds, flowers, etc., is explained as due to the pigment cells, but that of the peacock and certain pigeons is more like the light reflected from extremely thin metals. A. Michelson estimates that the thickness of the pigment film in some cases does not exceed twenty-five one-hundred-thousandths millimeter.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Astute Amoras.—

Selenium cells are made which are 100 times as active electrically in the light as in the dark, and which respond to an exposure to light in a few seconds.

Eighty cities in Great Britain use their garbage for the development of electric power, and the number is increasing.

The most delicate test for hydrogen peroxide is a strip of paper saturated with a cobalt-naphthenic acid solution. One part of peroxide in one million can be detected.

Celtium is the name of the newest element in point of discovery. Maybe its properties have something to do with its name.

Thallium is ranked as one of the most poisonous of metals, being close to arsenic in toxicity.

Areca nut in one-per-cent proportion will destroy vinegar-eels. Senna and kamala will also destroy them, but more slowly.

Rapid digestion does not necessarily mean more complete assimilation of foods. There is some evidence that there is better absorption in slow than in rapid digestion.

Violet light decomposes water in the same way as that of an electric current, but very slowly. It first forms hydrogen peroxide, then splits this up into hydrogen and oxygen.

Sunflowers, which are in common use in Russia for medicinal purposes, and also for food, have been found to contain two alkaloids—choline and betaine.

Fruits contain an enzyme which protects them from fungus and bacterial growths, and which when the fruits are bruised is the cause of the brown color which develops in the bruised part.

Dr. Boetau, of France, has given his life to radium research. His hand was burnt by radium and the burn killed him. Operations failed to save him.

Bromine solutions in which there is no bromide are darker than the same strength of solutions in which a soluble bromide is dissolved. In other words, bromides reduce the color of bromine solutions—to a certain point.

Distilled water, in the presence of air, dissolves lead and iron. The metals dissolve in the colloidal condition.

Sodium aluminosilicate, made by boiling together sodium silicate, sodium hydroxide, and aluminum hydroxide, is said to be a good substitute for soap, and is recommended as a detergent.

Over 2000 tests of the air in sleeping-cars, under varying conditions, have convinced T. R. Crowder that the ventilation in sleeping-cars is ample, and that discomfort is due to overheating or other causes.

J. J. Hazewinkel says that a satisfactory caramel may be made by heating molasses to 125° C. for five to ten hours, the time being controlled by testing the intensity of the color.

Oh for a Patent on This!—

One of the latest theories of the disintegration of matter (called out by radium and actinium) is a suspicion which scientists hardly dare to voice, that there is a continual disintegration of *all* matter, stability being only relative, and the new and perfectly inactive gases recently discovered in the atmosphere being among the most stable elements. Hence the day may come when, able to control the internal forces of the atom and to effect the transmutation of atoms, man may set about destroying matter as such altogether, for use in his industries at so much per kilowatt-hour. It is just as reasonable for an atom to die as to be born. —(Alfred Sang, in "The Underlying Facts of Science.")

Aeroplane News.—

A. Wegener says that the atmosphere probably consists of four layers: The lowest, one of clouds and storms, and of temperature decreasing upwards. This layer is calculated to have an average height of 11 kilometers (7 miles). The second layer extends to 70 kilometers (44 miles) and has a uniform temperature of about —55°. Above this lies the hydrogen layer, extending to about 220 kilometers (138 miles), in which the shooting stars are brought to incandescence. And still above this is a layer of a gas unknown on the earth which is still lighter than hydrogen.

Costs More!—

Professor Ostwald has obtained ice in a colloidal condition, the particles being so small that they passed through a filter-paper. He thinks that the colloidal condition is possible for all matter. Colloidal ice is not perfectly clear, but has a blue-yellow opalescence.

You're Another!—

P. Weiss says that "Magnetron" is the ultimate principle of matter, the thing from which atoms are built and in which all things exist. He has found it in atoms of iron, nickel, cobalt, copper, manganese, uranium, and the rare earth metals.



WHERE THE CALIFORNIA MEETING IS TO BE HELD.—The annual meeting of the California State Pharmaceutical Association will be held this year at the famous Hotel Del Monte. This is within a stone's throw of many old historic places, one of which is illustrated in the present picture. This shows the Carmel Mission, which is very near Monterey. The convention will be held during May; the place is one of very great interest; the Entertainment Committee is getting up a lot of special things; and there is every reason why the attendance should be a large and enthusiastic one.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Baking Powder.

S. W. K.—Cream of tartar and sodium bicarbonate, mixed in the proper proportions, yield a baking powder which is apparently the least objectionable of any, from a hygienic point of view, and gives satisfaction. As the result of an investigation of the leading powders of the market, Crampton, of the United States Department of Agriculture, has proposed the following formula for a cream of tartar baking powder:

Potassium bitartrate	8 ounces.
Sodium bicarbonate	4 ounces.
Corn-starch	4 ounces.

The addition of the starch answers the double purpose of a "filler" to increase the weight, and a preservative, the chemicals not keeping well when mixed alone. The stability of the powder is increased by drying each ingredient separately by exposure to a gentle heat, mixing at once, and immediately placing in bottles or cans, excluding access of air, and consequently moisture.

A cheaper powder can be made after the following formula, but it will not be found nearly as satisfactory:

Ammonium carbonate, crystalline.....	6 ounces.
Tartaric acid	½ pound.
Alum	1 pound.
Sodium bicarbonate.....	1½ pounds.
Starch (or flour or potato farina)....	2 pounds.

The ingredients must be pulverized and sifted separately, dried at a very low temperature, mixed in a perfectly dry room, and immediately packed with great pressure into receptacles and sealed air-tight, to prevent, as nearly as possible, the loss of ammonia.

Lemon Cream.

C. H. H. wants a formula for making a toilet preparation—a cream of fresh lemons.

The following formula forms a pomade from which we confess the watery portion has a tendency to ooze out:

White wax	2 ounces.
Spermaceti	2 ounces.

Melt together and add

Almond oil	8 ounces.
Oil of bergamot	2 drachms.
Oil of lemon.....	½ ounce.

Then the following warmed together:

Glycerin of borax.....	2 ounces.
Lemon-juice	6 ounces.

If two drachms instead of two ounces of wax and spermaceti are used, the result is better and the preparation a liquid.

A lemon cold cream might be made by substituting the juice of lemons for a portion of the water in preparing cold creams. But the product is not permanent unless the cold cream be made with paraffin oil or contains considerable petrolatum. Many formulas for cold creams with mineral oil have appeared in the BULLETIN before, and can be found by consulting the annual indexes in the December issues.

Sun Cholera Cure.

A. H. F. wants the formula for the old sun cholera cure with the directions for its use.

We do not know just what formula is wanted. In 1846 or 1847 there was an awful epidemic of cholera in this country. In New York people died like sheep. The New York Sun contributed a fund for the preparation of a cholera cure which was distributed free among the people in buckets. The sufferers were allowed to help themselves to the remedy. The formula resembled that of the present N. F. cholera mixture:

Tincture of opium.....	6 fluidrachms.
Tincture of capsicum.....	3 fluidrachms.
Tincture of rhubarb.....	3 fluidrachms.
Tincture of camphor.....	6 fluidrachms.
Spirit of peppermint.....	6 fluidrachms.
Alcohol	6 fluidrachms.

Average dose, 30 minims.

Whether the foregoing preparation is the old formula is hard to say. But it is certainly very similar. To omit the opium would be inadvisable. All the diarrhea mixtures in the National Formulary contain opium, as that is the ingredient which corrects the looseness of the bowels. We hesitate therefore to suggest a preparation without opium, as you request.

Poultry Powders.

W. A. M.—Various mixtures of powdered substances are dispensed under the names poultry powder, poultry food, egg food, and egg-making food. The latter two names are used because of the alleged property of these mixtures, of increasing the egg-laying power of hens and other fowl. Mixtures that contain strong spices like capsicum are supposed to stimulate the egg-laying power of fowl.

(1) Ground bone or slaked lime.....	12 ounces av.
Ginger	2 ounces av.
Gentian	1 ounce av.
Capsicum	1 ounce av.
Sulphur	1 ounce av.

Reduce all to powder and mix well.

Mix a teaspoonful with a quart of feed.

(2) Oyster shells, coarse powder.....	24 ounces av.
Calcium carbonate.....	2 ounces av.
Calcium phosphate.....	4 ounces av.
Black pepper	4 ounces av.
Capsicum	½ ounce av.
Venetian red	½ ounce av.

Reduce all to powder and mix well.

Use like the preceding mixture.

Clarifying the Juice from Sugar Cane.

M. E. B. writes: "What process is used for clarifying cane syrup? Name the chemicals employed."

The juice as expressed from the cane is a dirty-looking mass and requires to be clarified before it is concentrated. It is a very common practice to subject the fresh juice to the fumes of burning sulphur. In all cases the first step in the clarifying is the addition of lime to neutralize the natural acidity of the juice and facilitate the coagulation of the dissolved matter. The limed juice is next subjected to heating, and as the boiling point approaches a separation of the suspended and coagulated matter takes place, the light coming to the top and the heavy falling to the bottom. The common method of separating these bodies is by skimming the top coagulum and settling the bottom portion and drawing off the clear juice therefrom. In

addition to this, to get a more complete separation the heated juice may be run through a filter press.

It is decolorized with animal charcoal, the work being done in large cisterns.

Label Varnishes.

W. E. G. submits the following query: "Please publish the formula of some preparation other than collodion for painting over paper labels before applying the varnish. I find collodion dries too fast and also adheres to the brush so that it cannot be used again."

We give the formula of a varnish as well as the method of sizing:

Sandarac	3 ounces av.
Mastic	$\frac{3}{4}$ ounce av.
Venice turpentine	150 grains.
Alcohol	16 fluidounces.

Macerate with repeated stirring until solution is effected, and then filter.

The paper labels are first sized with diluted mucilage, then dried, and finally coated with the varnish. If the labels have been written with water-soluble inks or color, they are first covered with two coats of collodion, and then varnished.

Saturated Solution of Ammonium Chloride.

G. T. O. writes: "I am directed to make a saturated solution of ammonium chloride, using diluted alcohol as a solvent. How much ammonium chloride will be required to make 8 ounces of the finished product?"

According to the Pharmacopœia, ammonium chloride is soluble in three parts of water and in 80 parts of alcohol. Not knowing the solubility of the salt in diluted alcohol, it will be necessary to determine that experimentally. Suppose you start with $7\frac{1}{2}$ ounces of

diluted alcohol and gradually add ammonium chloride, agitating after each addition, until a slight residue remains undissolved, indicating that the solution is saturated. The yield may be a little less than 8 ounces or a little more, but that can be adjusted very easily.

Veterinary Colic Remedy.

W. A. M.—The following draught for horses has been found to answer better than any other combination, but has the objection of being rather expensive:

Solution of chloral hydrate (1 grain in 1 minim)	2 drachms.
Extract of cannabis indica.....	2 drachms.
Oil of turpentine	2 ounces.
Spirit of ammonia aromatic.....	1 ounce.
Solution of aloes (1 in 4).....	2 ounces.
Linseed oil, to make.....	6 ounces.

Mix and make a draught.

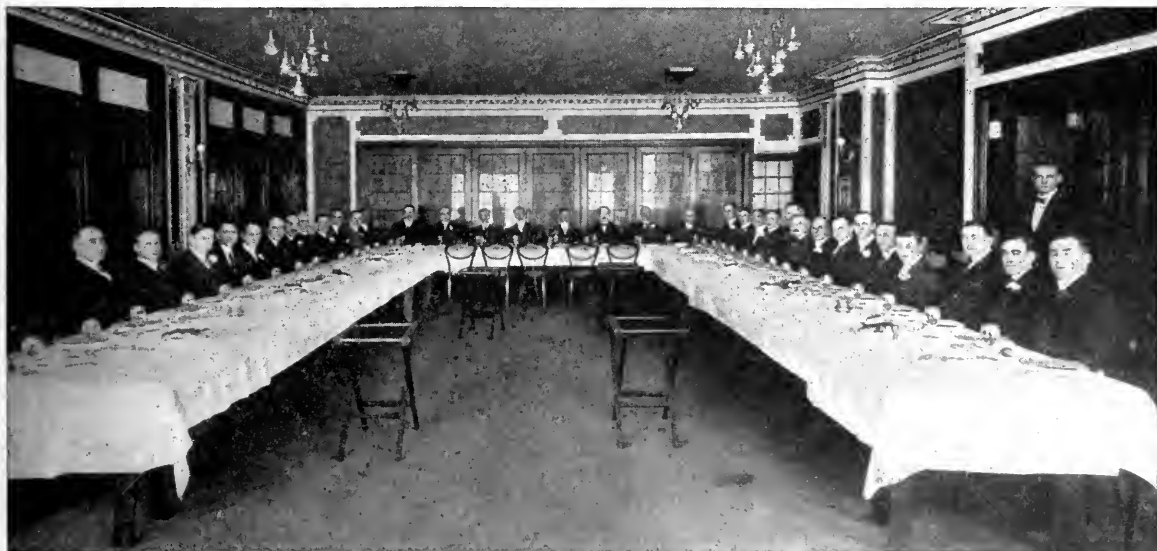
To be given in from $\frac{1}{4}$ to $1\frac{1}{2}$ pints of linseed oil.

This draught is an aperient, a diuretic, and an antispasmodic; it allays pain and checks inflammation. If gripes arise from impaction, it is doing valuable work while the veterinary surgeon is being sent for.

A Galenical Preparation of Phenolphthalein.

B. B. writes: "I would be glad if you will kindly print a formula for a liquid laxative containing phenolphthalein."

Such formulas have appeared in the literature during the last few years, but they are far from satisfactory. The taste of these preparations is extremely bad and all efforts to mask the disagreeable flavor have been unsuccessful. There is no elixir of phenolphthalein on the market that we know of. Phenolphthalein is best presented as a suspension in a chocolate syrup or in a chocolate lozenge.



A FAREWELL DINNER TO A. L. WALKER.—The annual meeting of the Detroit Association of Retail Druggists, reported upon elsewhere in this issue of the BULLETIN, practically resolved itself into a testimonial banquet in honor of A. L. Walker of this city. Mr. Walker is leaving for Seattle, Washington, to give himself a rest which a change of scene and of occupation will afford him, and he has sold his well-known pharmacy in this city in order to carry out his purpose. An alumnus of the School of Pharmacy of the University of Michigan, Mr. Walker for over 20 years has been one of the most able, faithful and self-sacrificing servants of pharmacy in Detroit and Michigan. Of pharmaceutical legislation he has always made a special study, and too much could scarcely be said of the good he has done and of the evil he has prevented. Mr. Walker is seen sitting at the head of the table in the very center.

That Creosote Mixture Again.

H. W. M.—John Evans, of Dublin, Ireland, noticed your query on page 42 of the January BULLETIN about the following mixture:

Morson creosote16 drops.
Alcohol1½ fluidrachms.
Water and syrup, enough of each to
make2 fluidounces.

Mr. Evans replies that "the foregoing mixture will not remain clear. If half the quantity of creosote is used it becomes opalescent when cooled to 60° Fahrenheit. If you desire a bright solution, 1 in 60, use 2 parts of glycerin to 1 part of water instead of syrup and water."

Worm Powder for Horses.

W. A. M.—The most effectual remedy is said to be a good dose of aloes, given on an empty stomach. This removes the parasites, but as the patient is probably weak a little tonic medicine is required, a very good formula being:

Santonin12 drachms.
Arsenic trioxide1 drachm.
Ferrous sulphate12 drachms.

Make into twelve powders and give one in the corn every day. Or give half the powders and then the physic, and later the other six.

It may be found best to give the powders as worm powders and advise a dose of physic after, because horsemen have a sort of idea that worm medicine is correct only in the form of powders.

A Point of Law.

J. H. submits the question: "Would I be allowed to ship remedies put up under my name and guaranteed under the food and drugs act by the manufacturers?"

Charles M. Woodruff, well-known expert in legal matters pertaining to the drug business, replies as follows to this query:

The manufacturer's guaranty and serial number should appear only upon the packages bearing his label. Packages put up for you with your name and address should be guaranteed by the manufacturer on the invoice covering the shipment. No guaranty is required on your label unless you sell through other dealers and desire to protect them. Such dealers would not be protected by the manufacturer's guaranty, but should have yours. If you desire to extend a guaranty you should file a general guaranty with and obtain a serial number from the Secretary of Agriculture at Washington.

Incorporating Deodorized Tincture of Iodine in Wool-fat.

J. H. asks: "How would you mix deodorized tincture of iodine with hydrous wool-fat?"

Evaporate off the alcohol from the tincture, replacing it with a little water. Then the solution should mix with the adeps lanæ hydrosus. Alcohol is not taken up by the hydrous wool-fat as readily as water.

Soluble Powdered Glue.

V. H. B.—This formula may serve your purpose. Suppose you try it:

Potassium carbonate1 part.
Alum1½ parts.
Ordinary glue or fish glue.....10 parts.
Water4 parts.

The whole is mixed and boiled, dried by ordinary methods, and then pulverized. It is applicable to any use.

Remedy for Heaves and Distemper in Horses.

J. A. S.—We do not know the composition of the proprietary remedies which you mention. For the treatment of heaves in horses, Fowler's Solution is recommended. In cases of distemper or catarrhal fever in horses the following mixture is used:

Powdered opium1 ounce.
Pulverized camphor1 ounce.
Quinine sulphate1 ounce.
Powdered gentian3 ounces.
Ammonium chloride4 ounces.

Make 24 powders. Give one powder at a dose in the feed or with a spoon three times a day.

German Creosote: Barbadoes Petroleum.

N. B.—Most of the creosote comes from Germany. The term "German creosote" probably indicates the beechwood variety, because the cheap coal-tar creosote can be obtained advantageously in this country.

Barbadoes petroleum, or Barbadoes tar, was formerly used for medicinal purposes. The Dispensatory says it is a dark-colored, almost black, viscid liquid, with a specific gravity of 0.73 to 0.78, and having a bituminous taste and odor.

Elixir of Catnep and Fennel.

W. E. G. wants a formula for elixir of catnep and fennel. Try the following:

Fluidextract of catnep..1 fluidounce, 160 minims.
Fluidextract of fennel..1 fluidounce, 32 minims.
Oil of coriander.....4 minims.
Oil of anise2 minims.
Alcohol.....1 fluidounce, 120 minims.
Syrup, enough to make.....16 fluidounces.
Caramel, enough to color.

Each fluidounce contains fluidextract of catnep, 40 minims, and fluidextract of fennel, 32 minims.

Removing Tobacco Stains from the Fingers.

G. W. T. wants a method of removing cigarette stains from the fingers.

Try an alcoholic solution of ammonia. It usually does the work. Among chronic smokers who roll their own cigarettes, the brown color is embedded deeply in the skin, but even such stains are in the greater part removed by a mixture of alcohol and ammonia.

Why Not!

A. W. O. asks the following question: "Has a druggist got a right to make toilet creams, corn remedies, and tooth preparations and sell them under his own name?"

Certainly—why not?

Short Answers.

J. A. S.—We do not know the composition of the liquid dyspepsia remedy which you mention. Possibly elixir lactated pepsin will serve your purpose. A formula for it appears on page 22 of the National Formulary.

E. W. H.—The subject of disinfecting of water-closets was treated in this department of the BULLETIN for November, 1911, on page 483.

R. U. B.—A formula for silvering mirrors appeared in this department on page 526 of the BULLETIN for December, 1911.

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THE MONTH'S HISTORY

DR. WILEY HAS RESIGNED.

Dr. Harvey W. Wiley, chief of the United States Bureau of Chemistry, on March 15 handed his resignation to Secretary Wilson of the Department of Agriculture. On the same day it was announced by the *Good Housekeeping* magazine that Dr. Wiley would become contributing editor to the Department of Health, Food, and Sanitation of that publication, with his office and laboratory in Washington. Thus ends the long battle and conflict of interests which has centered about Dr. Wiley.

The Doctor gave as his reason for resigning the fact that the activities pertaining to the Bureau of Chemistry were restricted, and various forms of manipulated food products were withdrawn from its consideration and referred

either to other bodies not contemplated by the law or directly relieved from further control. Dr. Wiley said further that the official toleration and validation of such practices had restricted the activities of the Bureau of Chemistry to a very narrow field, and that he himself had been instructed to refrain from stating in any public way his opinion regarding the effect of food substances upon health. Dr. Wiley also expressed disappointment that those who had made charges against him for alleged irregularities in the employment of Dr. H. H. Rusby as consulting expert had not been dismissed from office, for their remaining made him conscious of an official environment which was essentially inhospitable. The differences between his superiors and himself he believed irreconcilable.

There may be other reasons, however, for Wiley's resignation. The *New York Times* intimates that he finds it hard to resist the attraction of larger financial opportunities. It is said that he has been receiving offers from private houses for several years, and his friends have sometimes wondered at his willingness to continue in public service in the face of so much controversy and antagonism when he could enjoy peace and bigger emoluments in other vocations. "I have been lambasted so much for my opinions," he admitted a short time ago to a Congressional Committee, "that I am getting thin-skinned." Asked whether he would be a candidate for head of the proposed Federal health department, for which he announced he was going to work, he answered by saying that he had held all the government positions he cared to fill.

It is reported that in addition to his editorial work he will become a public lecturer.

* * *

WILEY'S SUCCESSOR.

Now that Dr. Wiley has resigned his position the selection of a successor has become a matter of considerable importance. A canvass has been inaugurated by President

Taft for opinions of the leading universities, as to the choice of a permanent successor to Dr. Wiley. President Taft expressed regret at the resignation of Dr. Wiley, saying that he was very sorry to lose the services of a man who had done such great work, and that he would be glad to have him continue in the employ of the government. President Taft feels that he will have difficulty in finding a man to fill his place.

Dr. Wiley, the *New York Times* says, would like to be succeeded by Dr. Barnard, State Food and Drug Commissioner of Indiana, one of the foremost champions of pure foods and drugs in the country. He regards Dr. Barnard as a man of executive ability and scientific attainments, qualities that would make him a worthy candidate for the position. Dr. Barnard is a graduate of Harvard and has been identified with State food and drug inspection since 1901. His likeness appears elsewhere in this issue.

Another candidate who is mentioned as a successor of Dr. Wiley is Dr. R. E. Doolittle, who succeeded Solicitor McCabe on the Board of Food and Drug Inspection. Dr. Doolittle bears a good record and has had considerable experience in the work of the office.

We find the *American Druggist*, however, warmly recommending Dr. James H. Beal for the place. The New York College of Pharmacy has taken up the idea with avidity, and has adopted a series of enthusiastic resolutions commending Dr. Beal to President Taft's attention, and earnestly urging his appointment.

* * *

AN IMPORTANT DECISION ON PRICE RESTRICTION. Justice Wright of the Supreme Court of the District of Columbia has recently made an important decision bearing on the right of the druggist to sell patent medicines at cut rates. It seems that James O'Donnell, the druggist, had been selling Sanatogen at cut rates notwithstanding repeated warnings to desist. Mr. O'Donnell insisted that he was privileged to cut prices on anything in his store. The Bauer Chemical Company, the proprietors of Sanatogen, therefore brought suit against Mr. O'Donnell, at first with little encouragement. Justice Barnard refused to issue a preliminary injunction against O'Donnell.

More recently the case came up again for a

hearing before Justice Wright, who also favored the druggist. The court refused the injunction sought by the manufacturer on the ground that the Bauer Chemical Company was privileged by its license to market a patent medicine, but not to dictate the retail price of the article to the druggist as the product had already become an article of commerce through a complete sale by the patentee.

The Bauer Chemical Company, ruled the court, might undoubtedly impose any restriction upon the price at which Sanatogen might be sold by the druggist provided that were done when the article was first supplied him. But the court went on to explain that having failed to place any restrictions upon the price of Sanatogen at the time when the goods were sold to Mr. O'Donnell, the patentee had no further power in the matter. Mr. O'Donnell had purchased the article outright with no understanding about price and was therefore free to dispose of it as he chose. It would seem therefore that any move to control the price at which a patent medicine is sold is valueless unless it is made before or during the sale. After a manufacturer once gives a customer a free bill of ownership of a shipment, he cannot dictate the retail price at which the goods must be sold.

Justice Wright held that the patentee may hold a licensee or the first buyer with whom he has a contract to the full retail selling price. But when goods are bought by a druggist not under contract from a licensee, the manufacturer's right to dictate the price ceases. The buyer in that event receives an unrestricted title to the goods and may sell them as cheaply as he pleases.

* * *

A DRUGGISTS' WAGON.

For several years druggists in the Middle West have felt the competition of itinerant vendors who canvass the country with their drug wares. Wisconsin pharmacists particularly have been alive to this traffic. They have therefore taken steps by which they themselves will operate wagons through the country. In fact the druggists in Jefferson county, Wis., have already met and made arrangements for the enterprise with headquarters in Palmyra. E. B. Heimstreet has been appointed to take charge of the venture throughout the State.

M. S. Kahn views with much satisfaction the attempt of Mr. Heimstreet and others in Wisconsin to meet the competition of itinerant vendors. Attempts to impose a heavy license upon such dealers have failed and been deemed unconstitutional on the ground that they interfere with interstate commerce. Mr. Kahn therefore recommends in a letter written to *N. A. R. D. Notes* the plan of having the druggists of a town or county join together in sending out wagons to compete with the peddlers. This he deems the remedy that can be most quickly applied, and he feels it should be put into practice all over the country until legislation can be provided to stamp out the evil and give the druggists the exclusive sale of pharmaceutical products. Mr. Kahn thinks that the druggists can beat the peddlers at their own game. The people moreover can easily be educated to understand that it is much safer and cheaper in the long run to purchase a line of pharmaceutical preparations made by expert chemists and sold only to pharmacists. Mr. Heimstreet himself feels sanguine of the success of the druggists' wagon.

* * *

STRIKING CASES OF DRUG ADULTERATION.

The Denver Branch of the A. Ph. A. recently gave a dinner at which the members had the pleasure of listening to Mr. Robert S. Hiltner, chief of the U. S. Food and Drug Inspection Laboratory of Denver. Mr. Hiltner read a paper on drug adulteration. Here are a few of the more flagrant cases he cited:

Belladonna and henbane leaves, aloes, jalap, sage, cubebs, ergot, hydrogen dioxide, calcined magnesia, and many others have been found to differ widely from U. S. P. requirements.

Some of the most serious forms of adulteration and substitution are as follows:

Digitalis leaves, decayed; cumin seed, broken and full of dust; gum tragacanth, mixed with other gums, dirt and foreign matter, all unfit for medicinal use; iron by hydrogen, containing an excess of arsenic; oil of cajuput, with copper; oil of cassia, with lead, copper and rosin, are examples of another type of adulteration.

Anise, fennel and quince seeds, cubeb berries, gum myrrh and benzoin, uva ursi, buchu and senna leaves, etc., have been repeatedly

found with excessive amounts of dirt and foreign matter, sometimes as high as 40 to 50 per cent.

Scopola has frequently been found substituted for belladonna root, pokeberry leaves for belladonna, long buchu for buchu, and artificial camphor for the natural gum. Such substitution is nearly always intentional, and is the more pernicious and more to be condemned on that account.

* * *

STILL WORK TO DO.

The number of such cases, as here enumerated, is becoming smaller and smaller every month, showing the wholesome effect of the law. Of course, it is not to be inferred for a moment, even if the drugs are pure when they are passed by the customs officials, that such high quality will be maintained until they reach the consumers. A single illustration, cited by Dr. Rusby, will emphasize the point. A New York jobber in crude drugs nearly fainted on being told that his ground belladonna root contained 50 per cent of olive pits, but soon learned from his own investigations that the miller, to whom he sent his fine drugs to be ground, was systematically abstracting a portion and substituting adulterants. Rascals there are in this country, as well as in Europe and elsewhere.

Most of the cases of adulteration observed in the inspection of interstate samples are in the same category with those noted for imported products, viz., failures to conform to Pharmacopœia specifications, substitution of cheap, inferior material for the more expensive or high grade; for example, senna siftings for leaves, acetanilide for phenacetine, mixing the product with dirt and inert vegetable debris. This is an exceedingly raw, offensive sort of adulteration. When one buys drugs that are as "cheap as dirt," he usually gets what he pays for.

* * *

DEATH OF LORD LISTER.

Joseph Lister, one of the most illustrious figures in modern medicine, died recently in London. He is known the world over as the discoverer of the principles of antiseptic surgery. It was Lister who exploded the theory of "laudable pus" and introduced measures to exclude infections from

wounds. The sterilization of instruments and dressings, the use of carbolic acid as a germicide, all date back to Lister. He also introduced the absorbable catgut ligature.

But it were only fair to add that Lister built up his theory of an antiseptis largely on the work of his contemporary Pasteur, who was teaching the world the rôle of germs in the processes of fermentation and putrefaction. When Pasteur announced that putrefaction was caused by germs, Lister at once surmised that suppuration was due to living organisms. He therefore took pains to exclude them from wounds, thus laying the foundation of modern antiseptic surgery. Few men have made greater contributions to humanity, and we can only observe with regret the passing of one who has done so much to save life and relieve suffering. Fortunately Lister lived to the good old age of 85. It is said that notwithstanding all the honors that were showered upon him he remained to the last a modest physician.

* * *

FAKE OPIUM CURES.

Jonah F. Rupert, a pharmacist in the United States Navy who has during recent months been on an American man-of-war over in Chinese waters, sends us the following paragraph taken from an annual report of the health officer of the port of Shanghai:

The attempt to stamp out the opium habit in China has produced a multitude of anti-opium medicines. Many of these have been found on analysis in the laboratory to contain morphine. These act by replacing the opium habit by the morphine habit. In more than one instance samples sent to the laboratory for analysis by manufacturers have been found without harmful content, while medicines of the same name purchased as sold to the public have contained opium or morphine. Even in the hands of a qualified medical man the cure of the opium habit by means of drugs is one of the greatest difficulty. That a proprietary medicine could effect such a cure is practically impossible. But in the use of quack medicines the foreigner is little better than the native. Those who never trust their watches or boots to an amateur for repair, readily yield their bodies to the prescribing druggist and patent medicine proprietor, whose main object is to make money out of the gullible.

It is nothing new to discover that proprietary articles intended for the cure of the opium or the morphine habit have themselves contained the very narcotics which they were supposed to combat. They have thus been fakes—pure and simple. We recall that two

or three years ago, Lyman F. Kebler, of the Bureau of Chemistry of the Department of Agriculture in Washington, prepared a bulletin showing that many of the habit cures imposed upon unsuspecting victims were frauds of this character.

* * *

CANDIDATES MUST OBSERVE REQUIREMENTS.

Candidates for registration papers must be very careful to comply with all the requirements of the State Board Examiners. Only recently, a few days before the Alabama State Pharmacy Board met in Birmingham, the members were informed through the Tennessee Board that one of the successful applicants at the Montgomery Board meeting last October had received a certificate through false representation. He was not twenty-one years of age, and had had only eighteen months' experience. Nevertheless, he swore that he was twenty-one and had had four years of experience. The young man hailed from Tennessee, and the foregoing facts came out by his trying to get an interchange certificate from the Tennessee Board.

The Alabama examiners learned that the young man was at work in a store in Birmingham, located him, and charged him with fraud. He confessed and was deeply mortified. His certificate was annulled at once. The Board passed a resolution that hereafter no application would be considered unless it be in the hands of the secretary with the fee and properly filled out at least five days before the Board meeting.

* * *

CIGARETTE CONSUMPTION INCREASING.

A statistical table printed in a recent issue of *Tobacco* reveals that the sale of cigarettes is increasing rapidly in the United States. The output during the month of January reached the enormous total of more than 667,000,000, or nearly double that of January, 1911, when it was something over 398,000,000. It is significant that during this month when cigarette production increases more than a quarter of a billion, cigars showed a falling off of more than 34,000,000. It is to be hoped that those tobacco dealers who cut the price on cigarettes with a view to making up the loss by the sale of cigars will see in these figures the folly of their action. The increase in the sale of cigarettes, it may be fairly supposed, was made at the expense of a decrease in the

sale of cigars. If the process continues it should impress upon all tobacco dealers that they must get the full price for cigarettes.

* * *

THE TELEPHONE SITUATION IN NEW YORK.

For several months the New York Pharmaceutical Conference has had some differences with the New York Telephone Company over the question of telephone commissions. The telephone company threatened to cut down the commission to 10 per cent, a move which the druggists very generally resented. In fact several had the booths removed from their stores. Now the New York Telephone Company comes forward with the following proposition, which will apply to all public pay telephone stations in Greater New York and probably throughout the State generally wherever the Bell system is installed: Stores doing 50 cents or less telephone business a day will receive 10 per cent commission on total receipts. Stores doing over 50 cents a day and up to \$1 will receive 10 per cent on the first 50 cents and 15 per cent on the balance. Stores doing a business of over \$1 a day will receive 10 per cent on the first 50 cents, 15 per cent on the second 50 cents, and 20 per cent on all receipts over \$1.

These terms are considerably better than the flat 10-per-cent commission at first offered by the Telephone Company, but it remains to be seen whether they will suit the druggists.

* * *

SWEET OIL.

From time to time the United States Department of Agriculture has received inquiries asking whether or not it is permissible, under the Food and Drugs Act, to label cottonseed oil as "sweet oil." Investigations have shown that some samples marked "sweet oil" consist of cottonseed oil or a mixture of olive oil and cottonseed oil. A careful consideration of the subject leads to the conclusion that the only oil to which the term "sweet oil" may be correctly applied is olive oil.

It is held, therefore, by the Board of Food and Drug Inspection, that any oil other than olive oil is misbranded when sold under the name of "sweet oil." It is not correct, for example, to label cottonseed oil as "sweet oil" and then elsewhere on the label to describe correctly the true character of the oil.

COCAINE CONSUMPTION DECREASING.

It is sometimes said that despite the increasing number of anti-narcotic laws, the total consumption of drugs like opium and cocaine is regularly increasing. That this is not wholly true may be gathered from an authentic report recently emanating from a dealer in Hamburg, Germany, who is claimed to be the largest handler of so-called crude cocaine on the European continent. He declares that the consumption of this substance during 1911 was only 2417 kilos, whereas 3330 kilos more than that were consumed during 1910. Thus the figures were cut down more than half in one year! In the meantime, however, the importation of the alkaloid to Hamburg from South America was just as great, so that the European market is now considerably overstocked.

* * *

WHAT IS MARASCHINO?

The question of labeling products designated as "Maraschino Cherries," "Cherries in Maraschino," "Bigarreau au Marasquin," etc., has been considered by the Board of Food and Drug Inspection. After due investigation the Board is of the opinion that "Maraschino Cherries" should be applied only to the marasca cherries preserved in maraschino.

Maraschino is a liqueur or cordial prepared by process of fermentation and distillation from the marasca cherry, a small variety of the European wild cherry indigenous to the Dalmatian Mountains. Liqueurs or cordials prepared in imitation of maraschino with artificial flavors or otherwise will not be held to be misbranded if plainly labeled "Imitation" in some manner to show their true character.

* * *

CONTAMINATED MINERAL WATER.

We have heard it said that mineral waters are apt to harbor germs. Now it appears that the government is taking steps to prosecute firms that sell such contaminated liquids. One company has recently been fined \$25 for supplying a mineral water that was found to be full of bacteria. The transaction was considered a violation of the food and drugs act. Adulteration was charged for the reason that the product consisted in part of filthy animal or vegetable substances and contained injurious ingredients.

EDITORIAL

IS HE RIGHT?

William J. Robinson, Ph.G., M.D., editor of the *Critic and Guide*, has a trenchant editorial in the February issue of that journal under this caption: "Of All Professions, Pharmacy Alone is Asleep." Dr. Robinson goes on to say:

All professions are waking up, physicians, dentists, lawyers, clergymen, even the nurses are beginning to take an interest in things other than those belonging to the strict limits of their profession. They are beginning to recognize that besides being doctors, lawyers, etc., they are also human beings; that besides belonging to a certain profession or trade they also belong to humanity. And they therefore invite prominent men to lecture to them on subjects outside their professional boundaries, on subjects of broad human interest.

Alone of all professions, Pharmacy sleeps. When druggists meet, they discuss such palpitating subjects as the best method of making lime-water, how to prepare syrup of senega, how to coat phosphorus pills (which nobody uses), how to make two cents more profit on Lydia's Vegetable Confound or Father John's Nostrum, whether it is best to dress the window with toilet paper or hair 'soles, or how best to handle stationery, candy, and ice-cream drinks. These subjects are proper subjects for pharmacists to discuss. But why not once in a while, once in a great while, take up some real subject, some topic of broad human interest.

Are you afraid it might hurt you, if you attempt to broaden your mind a little?

Dr. Robinson has the reputation of being a clear thinker and trenchant writer, but it is very evident that our medical friend has never attended an N. A. R. D. convention, or a good State meeting for that matter. His impressions of such conventions are evidently based on a few extracts from scientific papers that have been read at pharmaceutical gatherings and subsequently published in the drug journals. No topics of broad human interest at pharmaceutical conventions? Such an inference were most unfounded. Many a pharmacist in this country owes a good share of his general culture to a regular attendance at the annual conventions of the pharmaceutical associations to which he belongs.

Take the last annual meeting of the N. A. R. D. at Niagara Falls, for example. Men who left the four walls of their stores to attend that convention gave any amount of thought to subjects of a broadening nature. They gained some insight into the workings

of our national political bodies. Through the reports and debates of the legislative officers, they learned something about the great law-making machinery of our country. More than that, they themselves took an active part in the discussion of political questions, wrestled now with the Sherman anti-trust act, again with the Sherley bill, and then with other measures affecting the drug trade. Isn't that sort of work broadening and deepening? It gives a man a certain amount of judicial grasp and makes him a broader member of the community. How many of the druggists now in politics received their first knowledge of parliamentary law and their early training in public affairs from the proceedings of pharmaceutical societies? Drug conventions narrowing? Not for a moment.

At the last N. A. R. D. convention even the cigarette evil came up for consideration. The sale of liquor and habit-forming drugs was discussed. From the talk on these subjects the listener learned a certain amount of sociology, gathered ideas about human problems, and went away with a desire to do what he could to minimize social evils. Even philosophy came in for a fair share of attention at the Niagara convention. A whole afternoon was given over to a lecture by Elbert Hubbard. It abounded in wit and humor of the better sort. It brought the members of the convention into contact with literature that they may not have known before and contributed not a little to their intellectual enjoyment. What would the Doctor have us discuss? Women's suffrage?

Subjects of broad human interest! The national conventions are full of them. The State meetings, too, do much to elevate the intellectual level of all who attend them. It is a great mistake to suppose that all is lime and senega at pharmaceutical gatherings.

JNO. H.

THE ADVERTISING GAME—A NEW ONE!

We have it on the undisputable authority of an oft-repeated bit of wisdom that there is more than one way of skinning a cat. One of our "esteemed contemporaries" has discovered a new method recently. It is of more than passing interest. This particular contemporary is anxious to increase its circulation. So what does it do? It makes a canvass of different cities to see what the circulation is in

those particular places of the different drug journals. Now once in a while it happens that this one journal finds it has more subscribers in a town than any of the rest of us. Good! Then it proceeds to get out a folder giving the full list of drug journals circulated in that town, with the number of subscribers credited to each of them. Of course in such cases our friend appears at the top, with more subscribers than anybody else, and its name is printed in bolder and blacker type than is devoted to those of us who simply fill in the inconspicuous places underneath. Rather a clever scheme, isn't it?

But we are really beginning to worry—not for ourselves, but for our contemporary. We are afraid he won't find many towns where he stands at the top, and what will become of his scheme if he can only trot out a few circulars of this kind? The advertisers won't be convinced, will they? And if they are not convinced, what's the use of spending a lot of money in time, printer's ink, and postage charges? Oh, well, we always were able to take the other fellow's troubles philosophically, and so we shall let him skin the cat in any way that he thinks best. Skinning operations are rather difficult anyway.

But, speaking of skinning games, we can scarcely resist making the mild and temperate suggestion that our contemporary stick to the plain truth in giving his figures, even though it proves embarrassing. In the only circular we have so far seen, that alleging to give the facts about an eastern city, the number of BULLETIN subscribers credited to us was less than half of those on our paid list. This particular phase of the cat-skinning operation isn't clever—it's stupid!

THE ACTIVITY OF THE KANSAS STATE BOARD OF HEALTH.

The State authorities are doing some very good work in the prevention of disease. Kansas particularly has made an effort to educate people in prophylaxis, to teach them the simple measures which, properly observed, ward off infections. A Kansas Health Almanac is issued yearly conveying to the people the saving truths of public health. They are shown the loathsome nature of smallpox and urged to be vaccinated. Conditions that predispose one to pneumonia are given, together with the rules for avoiding the disease. The subject of in-

fants' complaints and whooping-cough are treated, and simple rules given for the prevention of tuberculosis.

Dr. S. J. Crumbine, secretary of the Kansas State Board of Health, is doubtless responsible for much of the good work that is being done in his State in the field of hygiene. He takes a very active part in the inspection and sanitation of both foods and drugs. He is responsible for the fly crusade. Knowing that these insects spread typhoid fever or even tuberculosis, Dr. Crumbine has urged the people to cart away or burn up animal and vegetable refuse upon which the flies thrive. Mosquitoes, too, have come under the ban. Stagnant pools which furnish a breeding ground for these germ carriers, are being drained or filled.

Dr. Crumbine is also responsible for the shipment of oysters in tightly closed containers which do not permit the addition of water and the entrance of disease germs. An effort is being made to exclude contaminating influences from this popular food. For when bacteria once gain access to oysters they find there a good medium for their growth.

Through the activity of the Kansas State Board of Health several fines have been imposed upon men for improperly displaying foodstuffs on the sidewalks. Dealers in some instances have been guilty of exposing meats, vegetables, and other kinds of foods without having them properly protected from insects or disease germs. Dr. Crumbine forces all restaurants, hotels, and various other establishments that cater to the public to keep their floors clean, their kitchens sanitary, and every door and window screened against flies. No one is allowed to haul bread or meats through the streets without having them covered so that they cannot be contaminated by dust. These are just a few reforms that Dr. Crumbine has accomplished in a quiet but forceful way, showing what a strong influence a State board of health can exert for the public good.

PHYSICIANS AFTER THE MIDWIVES.

Physicians are giving a good deal of attention to the status of midwifery if we may judge from the articles that have been appearing in the medical journals on that subject. They seem to be very much aroused over the way midwives have been encroaching on their domain. Far from being merely an aid to the

doctor, the midwife seems to be usurping his duties and supplanting him throughout the period of childbirth. It is said that in the large cities midwives have entire charge in over half the births.

No wonder the doctors complain. They take the stand, and very rightly too, that only a man or woman with a medical degree, with a professional knowledge of anatomy, pathology and obstetrics, can deliver babies safely. Frequently, moreover, minor gynecological operations are required at childbirth, which call for the services of an expert practitioner. Nevertheless the midwife often has no hesitation about handling abnormal cases as well as the uneventful ones.

In Europe, particularly among the peasantry, where women are rugged breeders, there is a bigger field for the midwife. Labor cases are normal and the physician is glad to be relieved of much menial work. Furthermore, the midwife cares for the family during the confinement of the mother, serving as a domestic as well as a nurse. But in America the midwife has few if any household duties. Her services are purely medical. To tell the truth, she supplants the doctor. Her charges, however, offer no particular inducement, for her fee is little less than the doctor's. She receives from eight to ten dollars a case. It is hard to understand why so many of the foreign-born women would rather have a midwife attend them than a physician. Modesty does not offer the explanation, for there are any number of competent women practitioners to attend members of their own sex.

And so the controversy continues between the physicians and the midwives. Meanwhile some substantial good has been accomplished in that the different States have raised the requirements for the practice of midwifery. In New York City, for instance, women who wish to follow the vocation must obtain permits from the Department of Health. Their character, their past reputation, and their home surroundings are all looked into by the authorities. Recently a school for midwives was started in the metropolis, the first of its kind in the United States under municipal control. Candidates for a diploma remain for six months under the tutelage of a doctor and a nurse. This is right—if the midwives are to attend so many cases of labor let them be properly trained.

THE HALL OF FAME

LEAVES BASEBALL FOR PHARMACY.

Dr. James Casey, ball-player and dentist, has retired from baseball. He has purchased the drug store of A. L. Walker on Woodward Avenue, Detroit, Mich., and says he is through with the diamond for all time. Dr. Casey is the second ball-player to embark in the drug business in Detroit within a short time. Davy Jones, Detroit's left-fielder, is the proud proprietor of a flourishing store on Adams Avenue East.

At the close of the 1911 season Dr. Casey decided that he didn't want to play baseball



DR. JAMES CASEY.

actively any longer and was looking for a position as manager, when A. L. Walker, a prominent Michigan pharmacist, offered his store for sale. It was a first-class stand on Detroit's busiest thoroughfare, and Dr. Casey bought the place. He is a graduate in dentistry of the Baltimore Medical College, and for a time practiced that profession.

It cannot be doubted that if Dr. Casey shows half the "pep" in the drug business that he did behind the plate on the Tiger Nine, his success is assured beyond a doubt. Dr. Casey began his baseball career as backstop, and in six years worked himself up from the New England League to the Eastern. Possessed of a splendid throwing arm, he was a strong man on third base as well as the home plate. He

first started in 1892 with the Pawtucket, Rhode Island, Club. Then he went to Lawrence, and in 1894 to Portland, Maine. For three seasons he caught for the Toronto Club, going to Washington during the year of the Spanish-American war. The season of 1899 found him with Brooklyn and with the National League Champions.

It was in 1900 that Dr. Casey came to Detroit to try his fortune with the new American League. He remained here through the season of 1902, when he returned to the National League to play with the Cubs. Dr. Casey served as catcher of the Detroit team, where he earned the reputation of being an excellent player. He also became well known for his keen wit and repartee, being one of those players to whom the fans were glad to listen. Dr. Casey was not a flashy player, but always a brainy one. He broke the baseball record for quick thinking.

A MAN WHOM DRUGGISTS ARE INTERESTED IN.

A feature of this issue of the BULLETIN which we feel sure will attract considerable attention is the page of nine portraits of State



FLOYD TILFORD.

Food and Drug Commissioners. These are some of the men who have made the drug trade sit up and take notice during the last few years. As the administrators of the State pure food and drug laws, they have suddenly become important in the pharmaceutical eye, and we are quite convinced that our readers will be glad to see what they look like in

actual life. They seem after all to resemble a lot of kindly disposed men!

In this place we are showing the portrait of Floyd Tilford, who is in charge of the Division of Foods and Drugs of the State Board of Health of Kansas. Dr. S. J. Crumbine, as the secretary of the Board, is the ranking officer in the enforcement of the food and drug law, but Dr. Crumbine has many other duties to perform, and he apparently leaves most of the food and drug work in charge of the head of the division. Mr. Tilford is furthermore Dr. Crumbine's immediate assistant, and is presumably in full authority during his chief's absence.

A YOUNGSTER WITH A PROMISING NAME!

The handsome boy of three years and six months shown in the accompanying portrait is



PARKE DAVIS EVERS.

Parke Davis Evers, of McGregor, Texas. His father, Max H. Evers, of the firm of Evers Bros., is so great an admirer of the house of Parke, Davis & Co. that he named his son after them. This certainly was a nice tribute to the firm, and it would also appear that, if there is anything in a name, this young man will in time be the head and front of some large manufacturing establishment. Look out for him!



Dr. John B. Bond, Sr., of Little Rock, Ark., whose home we show here, is familiarly known to druggists by his presidency of the State Board of Pharmacy.



D. J. Fink of Holdrege, Neb., is one of the active pharmaceutical figures of the State, and is an ex-president of both the Board of Pharmacy and the State Pharmaceutical Association.



This photograph of the residence of Prof. C. Lewis Diehl, 932 Cherokee Road, Louisville, Ky., was taken some years ago.



Owen Raymo of Wayne, Mich., has a comfortable home in one of the good-sized towns of this State.



From this photograph of the residence of E. C. Bent, Dell Rapids, S. D., secretary of the South Dakota Board of Pharmacy, it would appear that the Western snow-storms are the real thing.



H. Lionel Meredith of Hagerstown, Md., whose home is here pictured, is a member of the Board of Pharmacy and an ex-president of the State Association.

Homes of Well-known Druggists.



J. J. Goodyear, of Ann Arbor, Mich., has one of the most artistic and beautiful homes in an interesting University town where attractive residences are quite numerous.



This shows the comfortable porch and the well-kept lawn at the rear of Mr. Goodyear's house. The interior of the building is quite noteworthy.



The residence of H. K. Mulford, President of the H. K. Mulford Company, out in Wayne, one of the easily accessible suburbs of Philadelphia.



Here we have the homelike hall of Mr. Mulford's residence. Broad settees on each side of the room are not shown in the photograph.

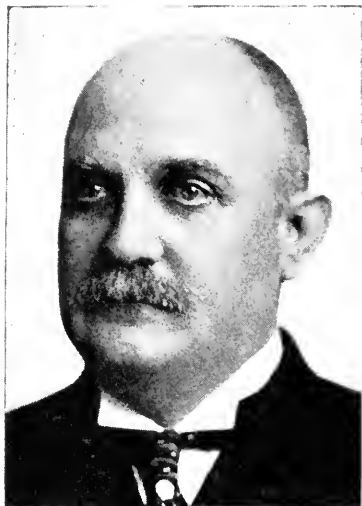


This picture of the home of Wm. Mittelbach, Boonville, Mo., was taken several years ago, and in the meantime one of the young ladies has grown up and married.



Alfred B. Husted, the well-known pharmacist of New York State, has now retired from active business life and is living in Delmar, one of the suburbs of Albany.

Homes of Well-known Druggists.



J. D. Ryan, Coffin, Redington Co., San Francisco, Cal.



Geo. W. Lattimer, Kauffman-Lattimer Co., Columbus, Ohio.



Wm. J. Walding, Walding, Kinnan & Marvin Co., Toledo, Ohio.



Samuel E. Strong, Strong, Cobb & Co., Cleveland, Ohio.



O. F. Fuller, Fuller & Fuller, Chicago, Illinois.



C. E. Bedwell, E. E. Bruce & Co., Omaha, Nebraska.



Clayton F. Shoemaker, Shoemaker & Busch, Philadelphia, Pa.



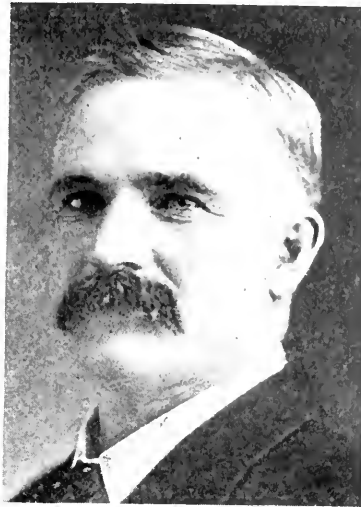
Wm. A. Hover, W. A. Hover & Co., Denver, Col.



Fred. L. Carter, Carter & Meigs Co., Boston, Mass.



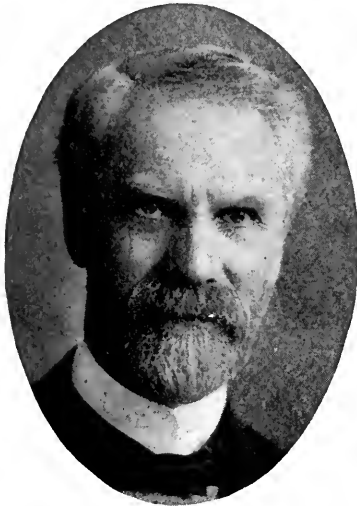
H. E. Barnard, B.S., Food and Drug Commissioner of Indiana, Indianapolis, Ind.



Gilman M. Dame, Dairy and Food Commissioner of Michigan, Northport, Mich.



James Foust, Dairy and Food Commissioner of Pennsylvania, Harrisburg, Pa.



J. Q. Emery, Dairy and Food Commissioner of Wisconsin, Madison, Wis.



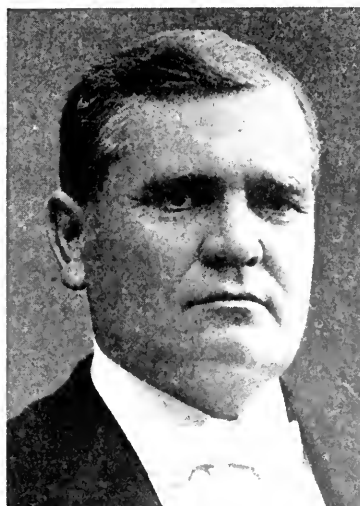
Charles Caspari, Jr., Food and Drug Commissioner of Maryland, Baltimore, Md.



Sylvanus E. Strode, Dairy and Food Commissioner of Ohio, Columbus, O.



E. F. Ladd, Food Commissioner of North Dakota, Fargo, N. D.



Edwin DeBarr, Director of Oklahoma Pure Food and Drug Laboratory.



Charles D. Woods, Administrator of the Maine Drug Law, Orono, Me.

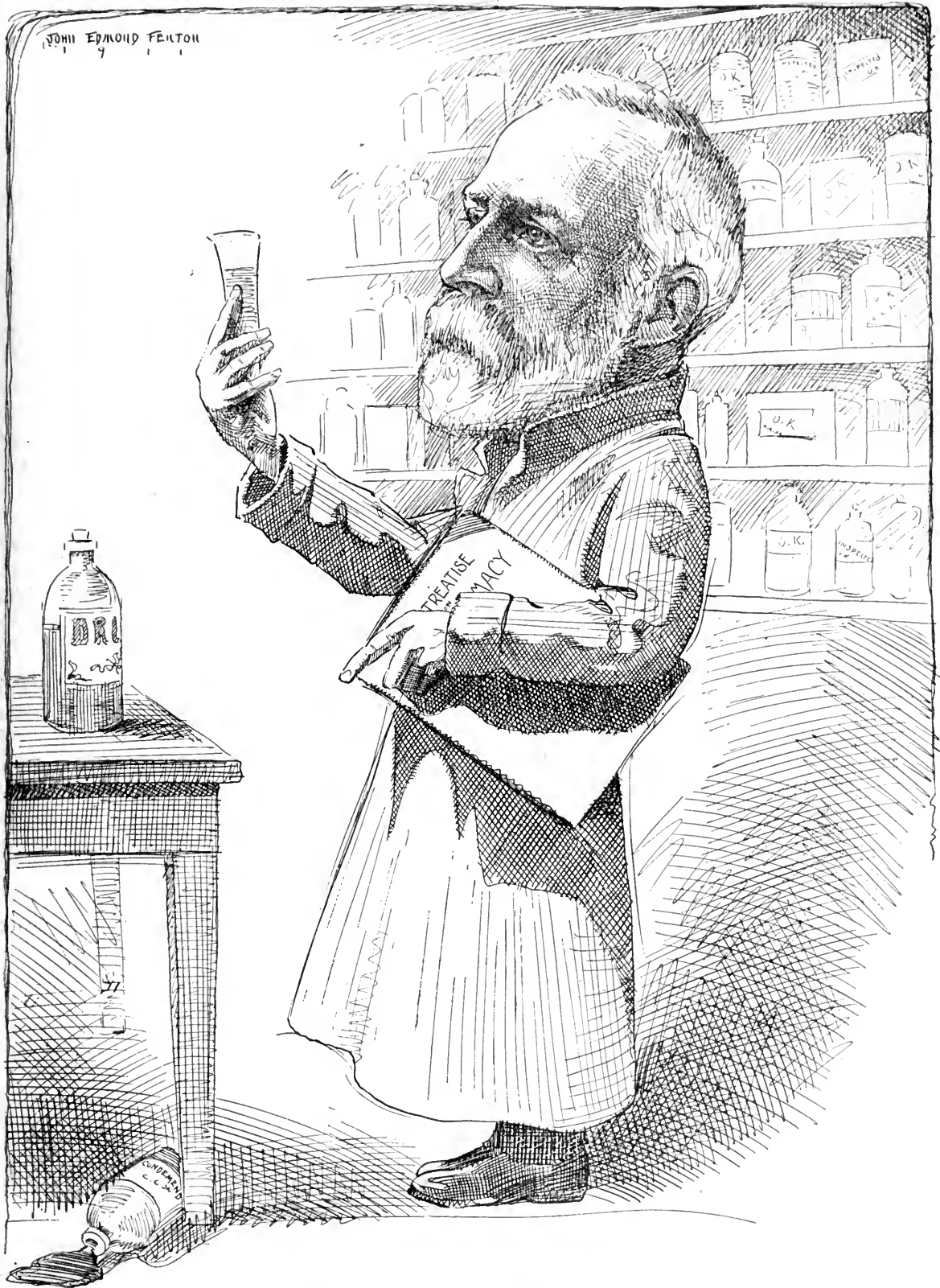
The Men Who are Administering the State Pure Food and Drug Laws.



[Photograph made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

1. Wilhelm Bodemann, Chicago.



Professor Caspari in His Rôle as Food and Drug Commissioner of Maryland.

Chas. Caspari, Jr., dean of the Maryland College of Pharmacy, author of "A Treatise of Pharmacy," one of the editors of "The National Standard Dispensatory," in early life a retail druggist for many years, and for a long period the general secretary of the American Pharmaceutical Association, was a year or two ago made Food and Drug Commissioner of the State of Maryland and is administering the law with great fairness and enlightenment.

The Routine of Dispensing Prescriptions.

We have invited several pharmacists who have made a study of dispensing to give us their ideas on the subject. They tell what systems they follow in compounding prescriptions. They describe their methods of checking and cross-checking to guard against mistakes. They discuss the question of uniformity in prescription work and tell what style of packages should be used for different preparations. Our readers will find this symposium of help and interest.—THE EDITORS.

BY CLEMENT B. LOWE, PHILADELPHIA.

The method of compounding prescriptions followed in my store is about as follows: When a clerk receives a prescription he is not supposed to stand and read it in the presence of the customer unless some question is asked about it. Customers are quick to detect some exclamation, or expression of surprise, which



Clement B. Lowe.

would lead them to think that there was something wrong with it. The clerk must take it to the prescription counter at once. I prefer to do this even if asked to price it, because a quick decision is often a wrong one.

THE PRELIMINARIES.

Before commencing to compound the prescription, the clerk must read it over so as to clearly understand what the doctor wants. The bottles containing the ingredients which are to go into the prescription are then assembled upon the prescription counter, in the order observed in the prescription, although this order is frequently not followed in compounding, as much judgment has to be exer-

cised in mixing the ingredients. After the ingredients have been weighed or measured, if actively poisonous, the weights and measures are checked off. The bottles from which the drugs have been taken are not set down again upon the prescription counter, but as each one is used, it is placed on a counter directly in the rear. This latter procedure I consider of much importance, because otherwise it is easy to pick up a bottle twice. Or one may be interrupted and forget the ingredients which have been used, if they are within easy reach.

FINISHING PACKAGES.

After the prescription has been compounded, if a liquid, the cork is capped, and the thread is brought up over the top of the cap and sealed in place with wax upon which is imprinted the seal of the store. This method of finishing a prescription looks well, and at the same time prevents it from being tampered with.

The label is then printed upon the typewriter, the use of which I strongly advocate, as it turns out labels that are neat looking and easily read. Fine label writing in these days seems a lost art. Good clerks are not always good penmen. We often have to copy the formula upon the label. If the liquid is a transparent one, we often put the copy upon the back of the label, or at least the number and date. If the latter procedure is followed, it will occasionally prove of service in renewing a prescription in which the label has been so soiled as to make it non-readable.

CHECKING AND CROSS-CHECKING.

When the prescription is finished except for the wrapping, it is checked off. The compounder of the prescription reads off the label and repeats the ingredients and quantities that he has put into it, another clerk in the meantime checking off by means of the original

prescription. The checking of the prescription is something that is absolutely indispensable and is of equal value to both apothecary and patient. Unfortunately it is not always carried out, even when it is advertised. I know of a large store that puts on the back of the bottle a little label with the name of the compounder and checker, when no effort is made at all to check the prescriptions.

Many of our prescriptions are phoned into us and verified by repeating them to the doctors. This saves considerable time, as we are in the suburbs. We are often expected to send a considerable distance to get a prescription, compound it and return it as soon as possible. Some of the physicians who phone in prescriptions leave the originals at the houses of patients as a precautionary measure. Some apothecaries object to putting up a prescription received by telephone, but we have had no trouble from so doing and it is a great time saver.

METHOD OF PRICING.

With regard to pricing prescriptions, we follow to a limited extent the schedule of the N. A. R. D., although many of the prices are higher than we can charge in this section. I consider, however, that they have quite a value, as it leads the apothecary to put a premium on his experience and time. A long apprenticeship, a college education and a board examination should all have money value. In giving a copy of a prescription, we consider it wise from the standpoint of our own interests to use the N. A. R. D. price mark as we believe that most pharmacists of our country will honor it.

BY LEWIS FLEMER, WASHINGTON, D. C.

As to your inquiry regarding our system of dispensing prescriptions, I suppose that our general method of checking is about the same as that followed in many other stores where this work is featured. There are, however, some details observed by us which may be of value or interest, and these I cheerfully submit.

UNIFORMITY IN DISPENSING.

For purpose of uniformity and to avoid differences in physical appearance of repeat or renewed prescriptions we have adopted fixed rules, followed rigidly by our dispensers, regarding the manipulation of each class of

preparations. Should any exceptions or variations to these rules be necessitated, the details are noted on the prescription, and brought to the attention of the other prescriptionists. Thereby any one of our four dispensers is enabled to refill a prescription so that the appearance is the same as that of the original, which he may not have compounded. This avoids annoyance both to the customer and to the dispenser.

As a rule nothing is added to or changed in a prescription except after consultation with the prescriber. Exceptions are made however in rare cases. For instance, we consider it



Lewis Flemer.

proper to add a small quantity of acacia to the following prescription: Phenacetini gr. xl, elixir aromatici dr. iv, aquæ menthæ piperitæ q. s. ad oz. ij.

ATTENTION TO CONTAINERS.

Liquids are dispensed in colorless, amber, or blue bottles, with cork, rubber, or glass stoppers, depending upon the nature of the prescription. For example, eye preparations, after being filtered through sterile cotton, are put up in glass-stoppered bottles, amber where indicated. Liniments and poisonous medicines are sent out in rough blue bottles with "red devil skulls" on the stoppers. Should two liquid prescriptions be sent to the same house, bottles of different sizes or shapes and labels of different styles are used to help in preventing the patients from taking the wrong medicine. Notations of the character of the containers and the various precautions are made on the prescription.

For dispensing pills, powders, and capsules

we have boxes of several sizes and various colors, as well as vials and bottles with screw-caps or sifter tops. The prescription bears indication of the container selected as well as the excipient, the coating and dusting powder in the case of pills, and the size of capsule. It tells whether the material was massed or prepared dry when capsules are dispensed, the size and kind of papers (whether plain, parchment, paraffin, or double wrapped) when the prescription calls for powders, or the character of the vial or bottle when a single powder is prescribed. These methods are followed also for suppositories, cachets, konseals, or ointments.

Pills or tablets of strychnine or other poisonous substances are placed in screw-capped vials, thus avoiding accidents through the interchanging of box tops. Care is taken to choose boxes of different sizes and colors when two or more are sent to one house.

When the nature of the prescription demands it, we sterilize the container and ingredients by heat.

A RECORD OF RENEWALS.

An exact record of the repetitions of prescriptions is kept. Each one of our four dispensers has his fixed section on the back of the prescription for recording his renewals. By

R. <i>Mr. A. J. Jones</i>	196438
<i>Phenylis Salicylatis 3 1/4</i>	<i>75¢</i>
<i>Acet. Ricini - 3 1/4</i>	
<i>Mixed fl. Capsules No. XXIV</i>	
<i>S. one three (3) times a day</i>	
<small>N.B. Dissolve Salol in the Oil by warming. Fill large end of No. 1 capsule. Seal by moistening cap in water</small>	

Note the directions for compounding. Renewal dates appear on the back of the prescription.

using a small rubber dating stamp, the location of the date indicates when and by whom the renewal was made. The accompanying illustration of a prescription taken from our files will show our system of making notations on the front of prescriptions.

This idea, I believe, is original with this store and was adopted before we had a narcotic and poison law here, the object at that time being to keep a check on habit-forming prescriptions. When such prescriptions were presented for renewal once or twice, we would

send a copy to the prescriber giving the date of the original prescription and the renewals and request the physician's written order regarding further repetitions.

The records have proven serviceable also for the purpose of checking up accounts, tracing prescriptions that were filled at the same time and placing the responsibility for renewals.

A great deal more can be said on the subject, but I have endeavored to point out only a few of the details which are so necessary to satisfactory prescription work and which are so often neglected.

BY H. A. B. DUNNING, BALTIMORE, MD.

We have no printed rules for compounding prescriptions in our laboratory. We do, however, depend upon our experienced and trusted



H. A. B. Dunning.

assistants to train the uninitiated to dispense in accordance with our ideas.

HOW OINTMENTS ARE MADE.

One of our rules, which I regard as among the most important, is that all powders entering into ointments must be sifted through 120 silk bolting cloth. Drugs and chemicals, frequently used in ointments, are sifted and stocked for the purpose—otherwise a small sieve is quickly prepared by removing the bottom from an impervious wooden box, of suitable size, the top being treated in like manner. A piece of 120 silk bolting cloth is fitted over the top and fastened into position by the wooden band.

In preparing ointments containing powdered drugs, in minute quantities, particularly for eye use, the drug is mixed with only sufficient oil to make a thick paste, which is spread in a thin smear over a large surface. We use large plate-glass slabs. This finely divided and thoroughly distributed mixture is thinned with a few drops of oil and is then mixed thoroughly with a small portion of fatty vehicle, previously rubbed to a uniform, smooth consistency. This mixture is then distributed with approximately equal bulk of fat until, by repeating the doubling process, the entire amount is incorporated. A somewhat similar mode of procedure is adopted for all ointments. When it is not desirable to use oil to rub the powder with, then some of the fat is used.

In our opinion, a carefully made ointment is one of the final tests of the efficiency of a prescription assistant, for obvious reasons.

DISPENSING POWDERS.

In compounding prescriptions for mixed powders to be taken internally, as, for example, extract belladonna 0.1 gramme, calcined magnesia 20 grammes, sodium bicarbonate 20 grammes, to be taken in teaspoonful doses, the potent ingredient or ingredients are bolted previous to mixing with the other ingredients, to break up lumps. The final mixture is then run through a sieve; the powder is mixed again. Tooth powders, prescriptions for which we get many, are prepared from bolted powders, which, after mixing in a mortar, are run through bolting cloth and are again mixed to insure distribution.

COMPOUNDING POTENT MIXTURES.

All mixtures of powdered drugs containing potent ingredients are compounded according to the following general method: The potent ingredient, as for example 1 grain of arsenic, is placed in a dry mortar, an equal bulk of milk sugar is added, and the two thoroughly triturated; this mixture is then mixed with an equal bulk of milk sugar, this doubling process being continued until from 5 to 10 grains of milk sugar have been added. Then all of the ingredients being in state of fine subdivision, the more gritty ingredient is added, not all at once, but a quantity equal in bulk to the sugar of milk mixture. This doubling process is continued until all of the ingredients are incorporated and thoroughly mixed. If the mixture is to be placed in capsules, more than

12, then quantities sufficient for 12, sometimes six, are weighed off and filled into capsules, weighing each third or fourth capsule. Much the same rule is adopted for powders. This means that, as a rule, we do not dispense more than 12 doses without subdividing, and that we do not find it necessary to weigh each capsule.

Mixtures of masses with potent ingredients, as, for example, asafetida and strychnine, are prepared only after the potent drug is thoroughly distributed in a bulk of inert powder equal to the bulk of mass, the whole being subsequently reduced to a mass of homogeneous consistency.

Odoriferous masses, when dispensed in capsules or inserted into the capsules, are handled in such a manner that the outside does not come in contact with the drug. The fingers which touch the capsules must also be free from odor. Odoriferous capsules or pills are dispensed in boxes, not closed bottles, for obvious reasons.

FILTERING PRESCRIPTIONS.

Eye solutions are filtered through both cotton and filter paper. The cotton, a small pledget, is placed in the neck of the funnel loosely and the point of the filter embedded in it. The cotton serves to collect any hairs washed off the paper. The eye solution is filtered through, usually, three to five times until a liquid of crystalline clearness, free from hair fibers, is obtained. We use S. & S. filters.

All solutions are passed through either cotton or finely meshed gauze, vinous liquids usually through gauze. Gauze is also used when the liquid is clear, but may contain specks of one kind or another.

We do not permit one or two drachms of a fluid to be measured in a four-ounce graduate. We generally dissolve all alkaloidal salts in a minimum quantity of water, by heat, before mixing with other liquids.

Powders suspended in liquids must be in a fine state of subdivision. Mixtures for external use, as, for example, zinc oxide, calamine, sulphur, etc., are prepared with bolted powders. Mucilaginous agents are not used unless directed, but when they are directed, a proper quantity is added to obtain good results.

Flocculent precipitates, which separate readily and produce unsightly mixtures, are gen-

erally made homogeneous with acacia, in internal mixtures.

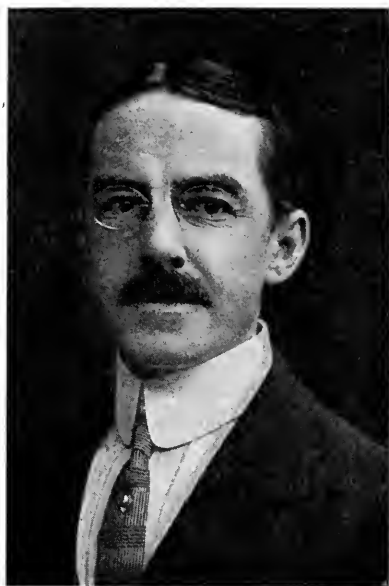
In conclusion, it seems to me that this discussion involves the broad subject of manufacturing and dispensing, concerning which a book might be written.

There is one important rule that I failed to mention for the employer. Don't quarrel with your clerks, but keep them informed of your wishes. Those whom you cannot trust and are inefficient will find it out and leave voluntarily through one cause or another. They will not gain the sympathy of your trusted employees and will probably not condemn you themselves.

BY RICHARD H. LACKEY, PHILADELPHIA, PA.

There is very little that is unique or unusual about my methods of work at the prescription counter, and very little that would be interesting or valuable to BULLETIN readers.

The ideal plan of conducting a prescription



Richard H. Lackey.

business would comprise a separate room for each compounder, where he would be free from noise and interruption, and have at his disposal proper equipment in the way of balances, complete mixing and filtering appliances, hot and cold running water, and a stock of those medicines ordinarily used in compounding. Easy communication should be had to a fellow clerk or proprietor for assistance in checking.

The ideal, to the average store, is impossible. The next best thing is a rule prohibiting the interruption of a clerk engaged in compounding unless it be unavoidable, an absolute rule against substitution, the use of the best materials it is possible to obtain, and the proper checking of all prescriptions, including the labels. If the compounder brings to bear under these conditions a proper experience in mixing medicines and an adequate theoretical knowledge of his profession, he will, other things being equal, make a success of his prescription business.

In the last analysis, however, to paraphrase an old adage, eternal vigilance is the price of safety.

BY WILLIAM H. KIRCHGESSNER, GRAND RAPIDS, MICH.

We have the following rules for compounding prescriptions: The solubility of all substances must be considered. All salts must be dissolved before other preparations are added. Alkaloidal salts must be dissolved separately before mixing with the remaining prescription. Saturated solutions of all the salts that are used to any extent are kept on hand and the amount of salt in drachms is printed on each label.

Eye lotions must all be filtered before they are completed. The dosage of each ingredient must be figured so as to guard against an overdose. All prescriptions must be copied from memory, and then rechecked from the original, as we copy all the prescriptions that are sent to us and return the original if wanted.

BY F. W. BROWN, LEAD, SOUTH DAKOTA.

I have never found it necessary to adopt a series of printed rules of compounding for the instruction of my dispensers. As I spend considerable time at the dispensing counter, I have encountered no difficulty in passing the following system along to my assistants:

1. Upon receiving a prescription, give the patron a check telling the number of it and the time required for dispensing.
2. Read the prescription carefully to determine as to compatibility, proper dosage, and the order in which the ingredients should be added to produce the best results.
3. Select the container, utensils, and ingre-

dients. Do not return the ingredients until the operations are completed.

4. Compound and check. Use the double-check system when there are two dispensers on the case. Otherwise recheck when returning containers to their respective places. Clear the counter of soiled utensils.

5. Write the label plainly and attach it to

the container, wrap neatly, seal, and attach the remaining check bearing the name of the patient, the number, and price.

In my opinion it is better form to write the label after the prescription is compounded, as it is a safeguard against confusion of labels when there are more than one prescription in the course of dispensing at the same time.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

(Continued from March BULLETIN.)

CHAPTER IV.

ADVERTISING THAT HELPED SPECIAL DAYS.

All kinds of holidays and celebration days bring with them special opportunities for the druggist.

These opportunities may not result in large receipts, or they may. A good deal depends upon how the druggist takes advantage of them.

I found it very profitable to get up special windows for all kinds of special days. I also used special newspaper advertising and sent special advertisements directly by mail.

CATERING TO STRANGERS.

Our town being the county seat we had several terms of court each year. Many strangers came to town, among them the jurors. We found it a profitable plan to mail advertising of the store's special lines to the jurors and the lawyers, whose names were easily procured from the public records.

When a man goes away from home to attend court for a few days, he is very likely to need a drug store. He wants cigars, headache or cold cures, stationery, post-cards, etc., and the store that has sent him a letter about such

goods inviting him to come there for them, is more than likely to get his business.

Court week used to bring in a good many natives of the hill country back from the railroads and towns, and usually produced some queer demands. One morning I had a call from a customer who wanted to know which was better, "Pumpkin seed root or pumpkin seed extract." I advised the woman that I did not think there was very much difference in the dose or in its effect. Another back country lady bought Peerless dyes to color her hair with, and I have no doubt that she secured a very nice shade, though her hair was not wool.

And this reminds me of a colored lady who came in and asked me for a "bottle of pink pills for pale people," and then insisted upon my spraying her with about seventeen kinds of perfumery which she did not buy.

January first is of course the first special day of the year, and for the average drug store it brings some special opportunities. The average pharmacy sells some blank books and diaries, and this is the time they should be pushed. I always made them the subject of my first after-Christmas window displays and newspaper advertisements. I tried calendar advertising too at this time of the year.

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CALENDAR ADVERTISING.

For six different years I used calendars at this season, and tried advertising special goods on them and also imprinting them only with the store name.

As a result of these calendar experiences I feel certain that the only gain from them was a limited amount of good-will. One January I gave away a large number of calendars on which I advertised a headache remedy put up and named for the express purpose of trying out the calendars. They did not produce one single call.

If you feel like paying out anywhere from \$5 to \$100 in good money for a very limited amount of good-will, I would say invest in calendars. If you want to get tangible and durable results, invest it in some of the more direct forms of advertising. I am free to confess, however, that in discussing this question with representatives of the calendar houses I have never found one who thought I knew what I was talking about.

One year I gave away instead of calendars little celluloid book-marks, and while they cost comparatively little they seemed to produce just as much good-will as the most expensive calendars I ever used.

SPECIAL HOLIDAY ADS.

For St. Valentine's day it proved profitable to send out an artistic valentine post-card each season with a special notice on it of a new perfume or toilet preparation, or a hair tonic. These of course were usually mailed to the ladies, and they were sent so as to reach them a day or so before St. Valentine's in order that they might not arrive after so many cards had been received that they were an old story.

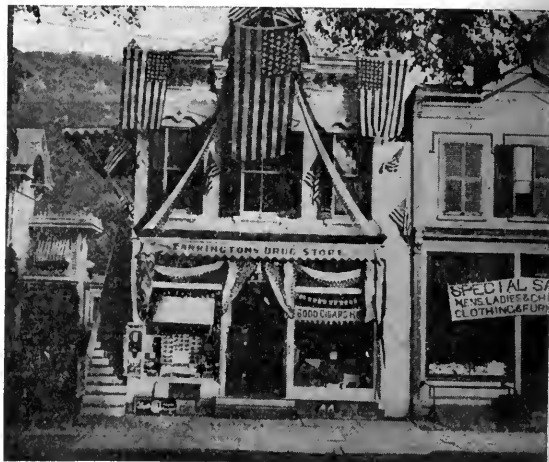
For Lincoln's and Washington's birthdays and St. Patrick's day I used special window trims with plenty of decorated crêpe tissue-paper to give appropriate backgrounds. Hatchets cut out of bristol board and pasted on the glass helped Washington's display. Large framed pictures of Washington and of Lincoln were easily borrowed for use in such window displays.

Of course the main display was always of some seasonable and salable goods, the special-day matter being only to attract attention.

Easter should be made one of the big times in the drug store. The sales of perfumes, gift goods, candy, etc., ought to be very large, and

they are if the druggist goes after the business in the right way.

One of the best plans I found for getting the Easter business was to give away a little souvenir of some sort the Saturday before Easter. On one occasion I offered in newspaper advertising and by dodgers to give free to every person making a purchase of five cents or more the choice of an Easter egg or chicken. I bought a large quantity of the little cotton chicks and the sugar eggs. Neither of these cost much, and a window full of them with a big sign "Given Away Free"



Mr. Farrington's store decorated for a firemen's tournament.

stopped every one who came along. Of course on the five-cent purchases we made no money, but the people who came in and spent only a nickel were very few.

POPULAR SPECIALS.

At another time I distributed a lot of dodgers advertising candy and bearing a coupon which read as follows: "This coupon is good for seven cents to apply on any purchase of 25 cents' worth, or more, of Huyler's on April 13. Only one coupon taken on each purchase."

This was another case where the acceptance of a coupon with the smallest allowable purchase used up all the profit, but it brought in the people, and they bought plenty of other things, so that the day turned out to be one of our biggest.

Another special offer that I made one Easter was of special candy packages which I priced at 29 cents, some of them being Huyler's that sold regularly at 35 cents. And I offered for 39 cents one of the packages of

candy and a 25-cent bottle of perfume. This was also a winning special.

For Decoration day we decorated a lot of post-cards of the local Soldiers' Monument with little flag stickers such as Dennison makes, and arranged a window display appropriate to the occasion with a stack of arms and some war pictures, flags, etc. We put in a rack of the special post-cards and sold them at one cent each. Another plan we followed was to give free on that day and on the Fourth of July a little flag with a pin on it to every customer. By the gross they cost almost nothing.

The week before commencement at the high school, we decorated a window with crêpe paper in the class colors and filled it with all kinds of goods suitable for graduation gifts. These included fountain pens, perfumes, books, toilet cases, mirrors, etc., etc.

Old home week is another special occasion. One of the best of ways to get the people interested in the store at that time is to use the windows for displays of pictures or relics connected with the history of the town, and to make the store a sort of semi-official registration bureau for all the visitors. Keep a big book in which every one is asked to register his name and the place he is stopping for the week.

Put a sign in the window calling attention to the fact that every one is asked to register there and receive a souvenir post-card of some prominent building. Send notices to every one whose name is mentioned in the newspaper as coming, asking him to come and register. Make the store a place where every one will understand that information regarding the presence of any one else can be determined. Your newspaper will work with you in accomplishing this, and it will make your store the most popular place in town all the week.

I have given two or three plans in previous chapters showing the ways of getting school trade at the opening of school. The school trade should be given careful attention. It pays well.

Labor day, election day, Thanksgiving day, are all suitable for special window displays, though there is not so much business in connection with them.

For Thanksgiving it is well to advertise such things as the store keeps that will contribute to the success of the Thanksgiving dinner. Candy, of course, must be remembered, and spices, sage, caraway, etc. Cigars should be mentioned, and, if you keep them, exhibit cards.

Christmas is of course the day that develops the most business of any of the holidays, and I have found the newspapers the best medium for reaching my trade at that time. Special folders and letters are good, but the newspaper reaches every one, and I have doubled or even quadrupled my space for the three or four weeks before Christmas, and taken particular pains with the advertisements, with excellent results. My December business I worked up from \$400 to \$1750 all with newspaper advertising.

I begin to sell Christmas goods just as soon as certain lines are received. I put them right on display with the regular stock in October and November, and the last of November I get the whole holiday line going. People are being educated now to buy early. I educate myself to sell early.

The advertisements reproduced this time show how the Christmas proposition was handled in the newspapers, as well as how other special seasons received particular attention.

So much for the special seasons, though I

Free Candy for Monday

A pound box of mixed chocolates.

Doesn't that sound good to you? On Monday next, Feb. 14th, to celebrate St. Valentine's day we are going to give free with a purchase of a dollar's worth of Retail or A. D. S. goods (or both) a pound of mixed chocolates worth 40c.

This is given only with cash purchases. Only one box of candy to one customer.

If you want a dollar bottle of an A. D. S. or Retail remedy, better buy it Monday. If you want a half dollar bottle, better make it a dollar size or think of something else bearing the A. D. S. or Retail label to make up the dollar.

We have a very full line of both these fine brands of goods in remedies, toilet or salutes, etc.

Free pound of candy.

FARRINGTON'S DRUG STORE

Easter Writing Paper Bargain.

Here's something you can't afford to miss.

For two days, the Saturday before Easter and the Monday after Easter, we will sell a box of our finest note paper of the latest design and size for 10c and include free a 5c stick of sealing wax.

This is a dandy fashionable paper, one that you can use for any kind of correspondence, full time box, worth 30c.

Another Great Value!

For Easter Saturday and Monday we will also sell a 50c value in handsome note paper of 20c and include free a 5c stick of sealing wax.

See these papers in our window.

FARRINGTON'S DRUG STORE

FOR EASTER

We have some splendid offers worth while.

See our window full of Easter chicks, rabbits, ducks, Easter eggs, etc.

Easter rabbit and duck candy boxes, also fancy baskets, 10c and 25c each.

With every purchase on Saturday (today) of five cents or more we will give free an Easter egg or small chick (your choice) while they last.

A big variety of 10c Easter novelties.

With every ounce of our new "Buckskin Bouquet Parfume" this week only we give free a 50c box of Retail violet talcum. No better talcum made and the perfume is a dandy!

Fine Easter boxes of candy. A 60c special in decorated boxes that beats them all.

FARRINGTON'S DRUG STORE

For Graduation Gifts

Don't forget the sweet girl graduate!

The giving of presents to the friends who are graduating from school or college has become a universal custom.

We are here to help you give something that will be welcome and useful.

Why not a fountain pen? You can buy a good one from \$1.50 up. If you want something very fancy we can suit you.

If a fountain pen does not seem to be just the thing, perhaps a book will answer. We have books at any price you want to pay.

Books of poems attractively bound. New novels just out, etc.

Free candy and fine perfumes. Any price you want to pay.

For the graduating man we believe the fountain pen is the best proposition and recommend the new Parker-Jack knife pen.

FARRINGTON'S DRUG STORE

have not gone into details because space does not permit.

FINED AND CALUMNIATED.

It was about this time that the State board sent a detective to town, and he got in some of his fine work on my unlicensed clerk.

The average village pharmacy has no licensed men besides the proprietor. The unlicensed clerk or clerks sell almost everything when the boss is present. And notwithstanding their orders not to sell goods which they have no right to when he is away, they often find it easier to make the sale than to explain that they haven't the right. In most cases, too, the proprietor winks at the practice. I did.

Well, the State board detective came in, and by more or less specious representations induced the clerk to make a sale of tincture of belladonna. I did not know anything about

GIFTS FOR HER		GIFTS FOR HIM	
PERFUMS	Every woman and every girl likes good perfumes. No one likes poor ones. We have a dandy line of high grade goods in the imported and domestic grades. The most attractive and fine packages we ever had. All orders.	BOOKS	Of course there's nothing that fits everyone the way a book does. We can give you a book at any price that will fit any man or boy of any kind of taste. If he can read, we can show you a book to please him 10c up for books.
WRITING PAPER	No one ever has too much writing paper. It all gets used up sooner or later. You should see the fancy boxes we have at prices that beat all records. 10c gets a heavy belly box. These are all grades up to \$1.00.	CIGARS	Does he smoke? For the man who likes a good cigar, nothing is more acceptable than just that. Don't be led into buying him a poor smoke though. Better leave it to us to choose the cigars. We guarantee them to please \$1.00 a box up.
BOOKS	Of course she would like a good story for the winter evenings. No matter what her age, we can fit a book to the case.	PIPES	Our line of plain and fancy pipes is a fancy. If he likes a pipe, let us show you some of our own goods. Best briar or meerschaum grade with high grade amber stems. Some gold mounted, some not. All prices, 10c up.
TOILET PREPARATIONS	Nothing pleases a woman more than some addition to her toilet table. We have all sorts of toilet preparations in attractive boxes, etc. and something of this sort is always short. It may be cream that she is out of, or nail polish, or powder or perfume or what not? We have the goods and something like these added to a man's present for his wife is sure to be appreciated.	FOUNTAIN PENS	There's no better fountain pen made than the Parker. The best gold pens in the best barrels. Parker pens are all warranted, from \$1.00 up. A good gold-filling pen for \$1.50. If the point doesn't suit him, he can change the pen after Christmas.
RULERS & CANDY	No one has found any substitute yet for "Hugley's" No Christmas is complete without it. We have the best line of it we ever had.	OTHER THINGS	He may need a traveling case with brush, comb, etc. Good ones for \$1.00. Fine stationery for men's use—any price you want to pay. Dozens of all sorts at all sorts of prices. Fifty of other things we haven't room for here.
POCKET BOOKS	Before you pay a lot of money and a big profit to someone for a pocket book, look over our line of these goods.		

Farrington's Drug Store

A newspaper ad. gotten up for the holiday season.

the sale until the papers in the case were served, and then I found it out too late. There was nothing to do but to settle the matter up quietly, which I did, paying a fine of \$75.

It taught me a good lesson and I hope that it may have its effect upon others, so that they will not have to give up the amount of the fine.

Just how the matter reached the newspapers in the town I could not say. Perhaps the fact that a member of the State board was a competitor of mine had something to do with the incident. A news item appeared stating that I had been fined, etc., for violation of the pharmacy law. My judgment was against taking any notice of the matter, but I was unfortunately advised to try to justify myself in the next issue of the paper, and of course what little I could say in justification did not amount to anything and only brought the mat-

ter once more to the attention of the public, many of whom had not noticed the original item. Furthermore, it showed that I was "sore" about it.

That one experience has been worth to me what it cost, not only in showing the advantage of living up to the law, but also in teaching me that it is folly ever to rush into the newspapers to try to justify oneself for a more or less reprehensible act.

The man who carries his quarrels into the newspapers is a fool. The man who allows himself to get into a quarrel with a newspaper publisher or editor is also a fool. The fellow with the newspaper has something right at hand that will enable him to come back at the outsider indefinitely.

HELPED BY CIRCUMSTANCES.

Competition began to dwindle, and business kept moving up a notch higher every year. The sales were up to \$10,650, when an event occurred that made a good deal of difference with my business and plunged the whole town into a period of gloom. This was nothing less than a hotel fire in which my strongest competitor and his wife lost their lives.

It seems impossible that a three-story country hotel could burn down so quickly that the occupants could not get out, but this was to an extent the case.

The fire occurred at five o'clock on a January Sunday morning, and the druggist and his wife and another village business man who lived at the house lost their lives by suffocation. What few other people happened to be in the building escaped without much clothing by coming down rope fire-escapes.

Right here I want to go on record with the statement that no druggist ever had a better or pleasanter competitor to fight than I had in Billy Winters. There was not a more popular man in the town, and he deserved his popularity. I would far rather have seen my business go to the dogs than to see it succeed by reason of any such catastrophe.

It was not many years after this that the State board man closed up his own store, and a few years later the fourth druggist went south for the winter, shutting up his store for the time.

The Winters store, however, changed hands, and soon reopened with much more modern equipment and better fitted than ever to fight

for the trade which it was apparent was to be divided mainly between the two of us.

STRIKING HIS GAIT.

By this time I had the advantage of being the best established store and much the best stocked. When one has reached a point where he can afford to carry a complete stock and where advertising has begun to bring business in an increasing ratio, things look better. The momentum is easier to keep up.

I found it very profitable to take up special lines and give them attention in the way of advertising. One of the departments that responded well to advertising among the farmers was a line of poultry remedies. The line had high merit, and the makers were willing to cooperate to any extent to develop new business. I furnished them with an up-to-date mailing list, and they kept me supplied with plenty of counter advertising, which we put into the parcels of all known poultry owners.

The fly-killer business, too, we went after strongly.

I did not stop with one line, but carried two or three good fly-killers. Kreso Dip was a continuous and successful seller in the fly season, and in the winter we pushed it to kill lice on stock. All these goods we sold always with an absolute guarantee of satisfaction or money back.

We sent out a demonstrator with fly-killer, and in one day he called upon 23 farmers and delivered to 15 of them a gallon each of fly-killer with the agreement that it was returnable if not satisfactory. A few paid for the can, but most of them were to pay if the goods were right. Of course no one was called upon who was not good pay. The manufacturers agreed to stand behind the guarantee and take back any returned goods.

Another good plan was the spraying of the stock at the county fair in our town with our advertised fly-killer.

There is little difficulty in getting the maker of a good stock specialty to agree to back up your guarantee if you will give the goods a push and get some business worth while on them.

THE RETURNED GOODS EVIL.

I remember one occasion when we did refuse to refund money on a purchase, and it made the customer mad, though we did not lose her.

One of the physicians bought a fountain syringe for a patient and paid for it, a special rate being made, as was our usual custom.

In a few days the woman brought back the fountain syringe still wrapped just as it had gone out of the store. The package had not been opened, and there would have been no harm in taking it back. But she wanted to return it to us and have us refund the price, the full price, as we could not admit to her that we had made a special rate. We offered to take it and ask the physician about and adjust the matter through him. Or we told her she could return it to him, and we would take

Last Call for Christmas!

DOLLAR BILLS 88c MONDAY. SEE WINDOW NOTICE.

Segars.

Every smoker expects some cigars for his Christmas.

If you aren't a judge of good smokes yourself, you can afford to trust us. We will sell you cigars that will suit the man who smokes them. What more can you ask?

If you want them by the box, we have them from \$.98 up. Five cent cigars, ten cent cigars and two for a quarter cigars in boxes of twenty-five each.

If you want just one cigar or a half a dozen, we will use the same care in selecting you.

Note Paper.

For man, woman or child we have the right thing in stationery.

Toy boxes for the children in decorated papers from 10c up.

Boxes of special fashionable paper for men, best grade, 50c.

Boxes of paper in holly trimming and otherwise very attractive, 25c, 35c, 50c, etc.

Our stock on these goods is always full right up to the last minute.

Christmas Candy!

If you want to give the best, there is but one best and that is Huyler's of course. All sized packages, at all prices.

Christmas pies filled with chocolates. Fine chocolates of Shraft's make in handsome pound boxes, 40c per lb.

Perfumes.

The last days before Christmas are the days for buying perfume. We sell more such goods the last day than all other days together.

This year we have some exceptionally good values in 25c and 50c packages and we think we have enough for everyone. The half dollar packages especially are great.

Hudnut's and other fine makes.

Hot Water Bottles.

Our experience shows that many people find a first class hot water bottle an admirable Christmas gift.

Nothing is more useful at this time of year and nothing more welcome.

We sell you the best bottle we can buy, a cloth reinforced, red rubber bottle holding two quarts for \$1.60.

These goods are going up a little all the time but we keep at the bottom of the market on them.

We have hot water bottles (2 qt.) all the way down to 48c each. We recommend paying at least a dollar for one.

Fountain Pens.

Another thing that we keep a full stock of right up to Christmas day. All prices from a dollar up.

For Late Shoppers.

No store has a better line for the belated Christmas shopper than ours.

FARRINGTON'S DRUG STORE

Another holiday ad.

it back from him and return to him what he had paid for it. But we explained that we could not give her back the price of it. We did not know that she had paid him for it. This resulted in a disgruntled customer, and while I believe in the Marshall Field maxim that "the customer is always right," still there are exceptions to every rule, and this was one of them.

During all of my store experience I did little advertising for prescription work for the simple reason that there was almost no prescription business in the town. During the years I owned the store our prescription numbers ran from 2187 up to 10,703.

The local physicians all carried nearly all the medicine they used, and sent to us only an

occasional order. I advertised to the physicians and made it a point to carry good goods for their office use, but it was often impossible to meet the prices of the physicians' supply houses without selling a lower quality of goods than we were willing to put out.

Some of those houses sold pharmaceutical preparations at a lower price than they could be made on the market price of the ingredients. Laudanum was one item of this sort. It is unfortunate that in New York State, at least, there is no standard of any kind set for the preparations a doctor hands out.

Fluids made of the discards from reputable houses, under-strength tinctures, worthless tablets—all these are all right when the physician sells them, but if the druggist gets caught doing anything of that sort, out with him quickly!

Still I have no complaint to make about the upholding of the pharmacy laws. I believe them to be just and I believe they should be rigidly enforced. But I believe the public should also be protected from the ignorance or the cupidity of the dispensing physician.

(To be continued in May.)

THE BEAUTY EXPERT AT THE CIGAR COUNTER.

Algernon Seeks to Give the New Girl a Lesson in Cigar Salesmanship, Only to Find that She's a Star of the First Magnitude—What Happens when a Customer Comes in for Some of His Favorite Cigars.

By CLEO CONSTANCE LONG.

"Feast your lamps on the new cashier, Clarence, me child," said Algernon to the soda boy one dismal morning when business was dull. "Feast them just this once, and then never again, 'cause I gotta hunch I'm going to tie a tag to that girlie before the week is out."

"Gee, you hate yourself, don't chu?" replied Clarence, "but take it from me, she ain't got nothin' on Miss Grace for looks. I could easy hate the guy that stole away our little Gracie, and the way that girl had the dope on cigars! Spiel off all them foreign names like a reg'lar wop! Bet this girl don't know a straight ten from a two-fer, coming from a department store—toilet goods, mindju—handin' out salve and sachet to the swell dames. What kind of a cigar clerk will she make?"

"Who put you so wise to her past history? Ever know her before?" demanded Algernon.

"All my life," said Clarence, airily. "Naturally, the boss consulted me before he put her in here, and—"

"Aw, wake up! Honest, did she come from one of them lady shops?"

"Yes, and I'll tell you how I know. 'Member last week when Mrs. Boss came in to hold up the old man, and decided to buy some cold cream? Well, Miss Grace had just left, empty was the cage, you were back of the

desk, and I was havin' a dull season. The boss called on me to hunt up the chilly cream for the madam, and I had one awful time findin' it too. She wanted a cream called Agnes, or Edith, or Gertrude, or something, and all I could get my mitts on was Emmas and Myrtles. Finally I discovered the right stuff, but all the time I was huntin' the madam was handin' it out to the boss somethin' like this:

"'What you need,' sez she, 'to compete with the department stores in this line, is an experienced salesgirl who knows the tastes of fas-tid-e-yuss wimmen. I don't wonder you lose money on toilet goods,' sez she. 'No one ever comes here for toilet goods but your own wife, as far as I can see, and you can't even find what *she* wants. There is a dandy little girl,' sez the madam, 'in the Ladies' Paradise Store, who knows all there is to know about every kind of toilet goods in the world. She's a clever, obliging little girl, and I believe she could sell extract of onion and persuade you it was odors of Araby,' sez she, or somethin' like that. 'I've heard dozens of women say they go there just because they like to have her wait on 'em. She'll size up their complexions, and tell 'em what particular kind of dope they need, and she is a reg'lar beauty lecturer when it comes to sellin' the goods.'

That's the line of talk she was handin' to the boss all the time I was routin' in the case for the Gertrude, and he just lapped it up like a sponge.

"Um, hum," sez he, kinder thoughtful. 'Wonder what they pay her? It might be a good stunt all right to put her in Miss Grace's place.'

"Well, you need one good live girl in here, and I'll find out her name and present salary from the Consumers' League," sez Mrs. Boss, and out she goes with her jar of Gertrude."

"How do you know this damsel is the same as those?" inquired Algernon at the end of this monologue, which Clarence had delivered to the accompaniment of the ice-pick.

"Oh, I heard the boss tell her she could make up an order for toilet goods she thought she'd have the most call for—and say! he's the slick guy all right. He's havin' some cards printed for her to send to all her stylish customers, statin' that Miss Josie What's-her-name, formerly of the Ladies' Paradise, is now in charge of the toilet goods at The Pill-penny Pharmacy, and will be durned glad, or words to that effect, to serve her former patrons in her new place. But I'll bet she can't hold down the cigar counter worth a cent," concluded Clarence pessimistically.

"Oh, I'll soon put her wise to that," said Algernon, and he strolled over to the cashier's cage where Miss Josie sat enthroned.

"Good morning, Miss Josie," he said in his best ball-room manner. "We're mighty glad to see a smiling face behind the bars again. Are you going to be the regular organist of the cash register, or just saleslady?"

"I don't know yet exactly what I am supposed to do," said Miss Josie, "except to wait on toilet goods. That's my special line, but when I'm not busy I'm to stay here and make change. Mr. Pillpenny said there wouldn't be much demand for toilet goods at first, but he hoped to increase the trade by employing an expert—that's me," and Miss Josie sent a radiant smile through the cage window, to the complete subjugation of the susceptible Algernon.

"Well, say," said he, "didn't the old man say anything to you about cigars? You see," waving his hand toward the cigar case, adjoining the cashier's box, "the cashier lady is always expected to wait on cigars, especially if she's a—an—an awfully pretty girl, you know."

"Oh, quitcher kiddin'," giggled Miss Josie: "but no one has mentioned cigars to me, and I don't know one cigar from another."

"Guess the boss meant to spring that on you after he'd got you in here," said the wise young man. "But honest, girlie, you'll have to hand out the weed. Miss Grace always did, and married one of our steady smokers only last week."

"You don't say!" exclaimed Miss Josie, with a dawning interest in the possibilities of the cigar trade. "Guess she was a good-looker all right."

"Oh, so so," agreed Algernon, carelessly. "I have seen girls that could make Miss Grace look like an Irish potato," with an admiring gaze on Miss Josie's blushing countenance. "But say, suppose I give you a few pointers on the cigar trade—what d'you say?"

"Oh, would you? It's awfully kind of you to take the trouble," beamed Miss Josie.

"Then let's begin," said Algernon. "It's a pleasure, I assure you. I'll be a customer, and you get behind the cigar case there. Clarence, dear, if you see any customers trying to break in on a rainy day like this, bolt the door, will you, darlin'?"

Clarence grinned, and Algernon approached the cigar case with the air of a connoisseur.

"What is the best thing you have in a straight ten, claro?" he demanded.

"But my name isn't Clara, and a customer has no business calling me by name, anyway," protested the cigar vender.

"You see—just as I expected—it's well I gave you a lesson. A customer would be quite likely to ask you just that question, or he might say: 'Let me have a clear Havana my-dear-o,' and you'd think he was a fresh guy, and get mad. Now a claro is a mild cigar, a colorado-claro is a shade heavier, a colorado is medium, and a maduro is heavy. Do you follow me?" asked the lecturer, pointing out the different varieties as he named them.

"I get chu," replied Miss Josie promptly.

"That's the right answer," approved Algernon. "Now spoze he asked you for a Ruth-shaped Pessimo. What would you hand him?"

"The icy glare, probably," announced Miss Josie.

"There you would be wrong, little one. The kind gentleman would mean no harm—he would only want this style," pointing to a box in the case.

Miss Josie reached in, selected one Ruth-shaped Pessimo, and laid it triumphantly on the counter.

"Never, never," cried Algernon. "Never as you value your life hand a man one single cigar. It's an insult. Set out the box, or grab a handful and strew them out before his dazzled eyes. Maybe he only wants one, but let him pick it out for himself."

"Oh, of course, anybody ought to know that," acquiesced Miss Josie, much crest-fallen; "and then do I hand him a match, or light the cigar for him?"

"By all means NO! That will *not* be necessary," said Algernon, "We couldn't handle the crowds at all if you introduced a stunt like that. Now as to the prices. These over here in this lonesome corner are the 25-cent straights, and you don't have much call for 'em, but it's good business to sell 'em when you can. This lot is 15 cents straight, these two-for-a-quarter, these straight ten, these five, and these measly ones here at the end are two-fers—two for a nickel, but no real sport would use 'em. Gee, bet this is a cigar customer comin' in now—looks like an actor or a drummer. Let's see how pretty you can wait on the gen'l'man, and I'll stick around and help you out if necessary."

"I'm scared to death," whispered Miss Josie, as Algernon slipped into the cashier's cage to be close at hand in time of need.

A prosperous looking individual approached the cigar case, and peered at the boxes with a critical air. "What is your best brand, in a clear Havana perfecto, Tampa made, colorado-claro, straight ten?" he demanded, with the air of a man who has a right to an unequivocal answer.

"Er, ah—Ruth-shaped?" ventured the new girl in a panic, and fencing for time, though delighted to recognize the term "Colorado-claro" out of a mass of meaningless words.

"I said perfecto," repeated the man distinctly, "or club-house. Have you the El Sevillio?"

"Elsie Villier? Elsie Villier?" murmured Miss Josie, thinking how strange it was that so many cigars seemed to involve the good names of women; then, as her frenzied gaze happened to rest on the 25-cent cigars in the corner, her natural salesmanship asserted itself and the accustomed phrases of the department store came trippingly to her lips.

"Oh, I have something here that I'm *sure* you'd like, and I want you to try it," she urged with her most bewitching smile. "It's the very *best* thing we have, and we put it in only for our most exclusive and fastidious customers. I *know* you'll like it. The last man who bought one of these cigars lighted it here at the counter, took one good whiff and turned right around and laid down a dollar for four more. It's a quarter straight, but you'll think it's well worth the price after one application, I mean one-er puff. I'm sure you will not be satisfied with anything but the very best." Miss Josie's ingenuous smile seemed to indicate that she felt herself in the presence of a prince. "And this *is* fine. It's perfectly *delicious*, fragrant, and *so* lasting! A direct importation, too. You won't find *this* line in any other shop. We have the exclusive agency, and really we can hardly supply the demand. You know how it is when once the society people take a thing up? Well, now all the society women—I mean, of course, the men—are just crazy over this cigar."

While orating thus glibly the former beauty expert of the Ladies' Paradise laid before the dazzled eyes of the would-be smoker half a dozen of the exclusive 25-cent straights. In a hypnotic state he pocketed four of the cigars, laid down a dollar bill, took one last long lingering look at the siren behind the counter, and departed. Miss Josie turned to her late preceptor for approbation, only to find that Algernon and Clarence were falling on each other's necks in a state of extravagant ecstasy.

"And *you* undertook to teach *her* how to sell cigars!" murmured Clarence, in complete surrender to the capabilities of the new cashier.

"And *you* thought Miss Grace was some dope-slinger!" gasped Algernon. "I'll take off my hat to you, Miss Josie," he continued. "You could make any gink believe that a Wienie sausage was a straight fifty-cent smoke, if you set your mind to it. The only trouble I anticipate is that the beauty expert is going to be so busy at the cigar counter that all the women of this town will lose their good looks for lack of expert consultation."

But Miss Josie had retreated to her cage and was ringing up her first sale of one dollar in the Pillpenny Pharmacy.

"MY BEST PAYING SIDE-LINE."

The Second Article in an Important Series by Different Druggists, in which Each Tells what Class of Goods has Paid Him Best—In This Store Kodaks and Photographic Supplies Brought the Business.

By JOSEPH C. C. WILKINSON,
Eglinton, Ontario.

Side-lines in the drug business have increased greatly during the past few years. This necessitates the greatest care in making them a paying asset to the business.

TRADE BUILDERS.

Kodaks and photographic supplies are the leading side-line in our business, not only from a money-making standpoint but also as a trade builder. Then, too, the stand of the



Joseph C. C. Wilkinson.

manufacturers to have a price protection is what we have been looking for in our own pharmaceutical lines.

The work of taking and finishing a picture has been so simplified as to be readily understood by a school child.

The advertising matter of the Eastman Kodak Company is strictly up to date and of an elevating character.

A kodak window display is always interesting to the passer-by and in most cases brings in a customer. Should his one purchase be only of a developing powder, we have a chance to show him something either per-

taining to photography or some other line in our store.

Since kodaks interest people of all ages, we are enabled to secure through their medium the patronage of each member of a family.

During the summer months we devote one window entirely to the display of kodaks. We change the arrangement and advertising matter each week. In the winter we make a full window display every two weeks, and the supplies are constantly on show in the store.

A KODAK CONTEST.

A kodak contest, however simple, will hold a customer and inspire him with a desire for better results. He will try again, and each effort brings him to our store for more supplies. We have found the following contest proves satisfactory. Each month a new subject is chosen and adds zest to the trials of our customers:

A coupon is given to each purchaser of kodak supplies entitling him to enter a picture in the contest. Conditions for our December contest were as follows:

Subject: Winter Sports.

1. Work must be strictly amateur.
2. Prints must be mounted.
3. Coupon must be attached to back of mount.
4. Entries must be in before Dec. 30, 1911.
5. Pictures will not be returned.

Prizes:

1. Brownie No. 2, or supplies value \$2.00.
2. Brownie No. 1, or supplies value \$1.00.
3. Portrait attachment.

The entries were numerous, and all promised to try again for the ensuing months.

PROFITS AND RETURNS.

We make 32 per cent profit on the sale of a kodak, which is only the beginning, and then follows a long list of supplies at from 20 to 40 per cent.

The first successfully finished picture brings the longing to enlarge, redevelop, retouch, tint,

and the many other attainments of the more advanced artist.

Such a contest conduces to salesmanship on the part of the clerk. One taking an interest in the work has a subject worthy of his interest. Although it requires some study and actual work to enable him to talk it intelli-

gently, he should take pleasure in adding to his knowledge of the subject.

Any information imparted to the customer is listened to with marked attention, and he will come back for more. Herein lies the chance for a salesman. Show the customer how simple it all is, and take the money.

MY PERSONAL EXPERIENCE WITH SHOW CARDS.

How Signs are Made—Practical Hints About the Paper, Ink, and Brushes—Several Specimens of the Author's Own Handiwork.

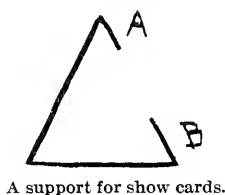
By ALEX F. PETERSON,
Missoula, Mont.

I have been deeply interested in the articles on card-writing which have recently appeared in the BULLETIN, having picked up some pointers from all of them. I give my experience in the hope that they may prove of some value to others.

There can be no question about the value of show-cards as an advertising medium. They can hardly escape the notice of a customer, and frequently prompt an inquiry into the merits of the article advertised, so that by a little further talk a sale is made which otherwise would not have been possible.

First, as to stock. I find that a two-ply kid finish wedding bristol is by far the most satisfactory. Having an extremely hard surface, it does not show the slightest trace of erasures, and the cost, five cents per sheet of 22 by 28 inches, is very little more than that of ordinary bristol. For mounting the cards, a ten-ply ripple mount is excellent, and can be had in many beautiful colors.

As a support for the cards, I use a strip of heavy cardboard about one and one-half inches wide and a little longer than the height of the card, and bend as shown in the following illustration:



By fastening the ends marked A and B to the back of the card with gummed strips, a firm support results.

As to brushes, I have found none that are as satisfactory as Eberhard's black sable card-writers' brush. The hair is of just the proper length, and has the right spring to produce smooth, even edges.

After experimenting with many kinds of colors, powders, pastes, and liquids, I have found that the fresco colors which come in glass jars give the best results and are the



Flower decoration done in colors by the author.

most economical. They can be had in many colors; but with white, black, red, blue, and yellow, one can produce, by proper mixing, any desired shade.

These colors are rubbed up in a mortar with a mixture of acacia one part, glycerin one part, and water eight parts. Then they are transferred to ointment jars. When they are to be used, it may be necessary to stir in a few drops of water to bring the mixture to the proper working consistency.

Most of the lettering shown in the accompanying illustration is single-stroke, and can be executed nearly as rapidly as writing.

The flower decoration shown in the cold cream card is easily done by painting in groundwork first, and outlining petals and leaves in black with a very fine brush.

Recently I used on a sign an enlarged copy of an etching which appeared in a drug journal. It showed a woman applying a cosmetic and was merely a bust outline in black. The lower portion of the oval in which the figure appeared was clouded by rubbing dry color over it with a small piece of cotton.

The card devoted to velvet cream and shown in one of the illustrations is used for a window

During the day it has the appearance of painted lines.

I have also made signs for the flasher by painting the words prominently in broad let-



The dark line border in this card is made by cutting out the cardboard and pasting colored tissue-paper on the back.



The figure in this sign is a cut-out from a magazine ad.

flasher. The dark lines are made by cutting out the cardboard and pasting tissue-paper on the back, making a pretty effect at night.

ters, making holes in these letters with a belt-punch, and backing up with tissue-paper.

Often a bottle of an article advertised is attached to the card. Sometimes this can be done to advantage.

No. 3 has a picture cut out of a magazine. The picture was pasted on the card. This is one of the quickest and easiest ways of adding to the attractiveness of show-cards. By using a border around them, or rubbing a little dry color on the card before pasting on the picture, the effect is improved.

After a little practice, the making of show-cards becomes more of a pleasure than work. Even a novice will soon be surprised at the selling force of the cards he can make.

WHO IS RIGHT?

By MAXWELL BUKOFZER.

Three druggists who met at their meeting room,
Discussed their ways to make business boom.
The first one, a Yankee, tall, nattily clad,
Said: "Fellows, granted that business is bad,
My maxim is: 'Quietly hand to your trade
What the public demands; thus your boom is made.'
And he kindled a match on his boot while he spoke,
And blew in the air a ringlet of smoke.

The next one, a German, bald-headed and stout,
Disdainfully dropped his lip with a pout:
"Sell stuff and be ignorant what it contains—
How it *does* attract a man that has brains!
Make money for people I never once saw—
Great task for a druggist, diplomed by the law!"
And he laughed and his voice was angry and loud,
And he puffed as in protest a mighty cloud.

The third one, eyes black, and of scant repose,
Proclaimed his race by the curve of his nose.
Quoth he: "Your ideas are barren of news,
I do not agree with you and your views.
My trade gets mainly what I prepare,
But if they want nostrums—well, I don't care.
I sell what they wish if I must, but I try
To show them the value of what they buy."

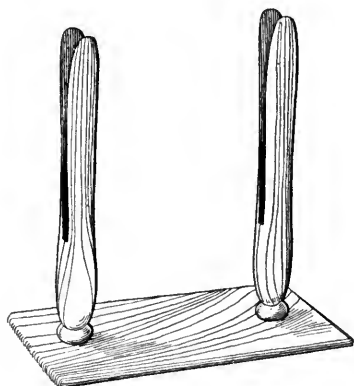
Just then another druggist appeared.
Bedad! you might guess where this one was reared.
"Say, Pat," cried the three to the man in the door,
"What's *your* idea of booming a store?"
Pat listened to what the trio would try,
Then he said with an Irish gleam in the eye:
"Begorra, me boys! I'll answer ye square,
Just wait till meself I'm a millionaire!"

DOLLAR IDEAS

A CONVENIENT PAPER HOLDER.

George TeLinde, Cleveland, Ohio: I submit a crude sketch of a little device I have found useful around the prescription counter. It can be used for holding powder papers, memoranda, and prescriptions when one is compounding them. It also holds show cards, price cards, etc.

Take two ordinary wooden clothespins,



place them two or three inches apart, and fasten them upright to piece of cigar-box board, using two cigar-box tacks to each pin.

It is very simple to make different sizes to suit your convenience, and the device can be improved by tilting backwards by tacking a strip of wood to the front edge.

THE FIRM NAME ON THE SIDEWALK.

Royal Gulley, Gowanda, N. Y.: When we came to have a cement walk laid in front of our store last summer it occurred to us that we ought to have our name on it. So we wrote a number of firms to see whether they could furnish us with the name in tile. We found they had just such a tile; they used it in hotel corridors, bath-rooms, etc. They said they could make up a sign with this kind of tile for \$7.50, the size being 2 by 7 feet, and this is the one we now have in front of our store.

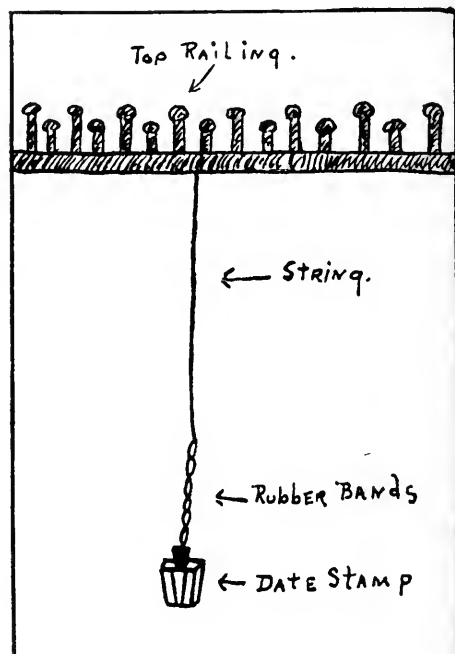
When it came I had the cement men take it, and they made a block of cement the same size and about 6 inches thick and set the tile on top in the cement while soft and let it harden. Two or three weeks later they laid the walk, putting the sign in position first and making

the rest of the walk around it. They were wise enough to put tar paper around the sign, between the fresh cement and the old, so that if one happened to settle a trifle, it would not disturb the other. As a matter of fact, the sign has settled a very little at one corner, but it has done no harm since we used the tar paper. The sign is about one and one-half feet out from the store and extends lengthwise with the walk. It bears the single word, "Gulley's."

In all the sign cost about \$12, and it is worth more than anything of the kind we have. People cannot help seeing it as they pass by. The border is made of green tile, square in shape, and one-half inch in width. The name is made up in green round tile, and around the name is white round tile; so it shows the name off in good shape.

TO KEEP THE DATE STAMP HANDY BUT OUT OF THE WAY.

H. Kallivoda, San Francisco, Cal.: To have the date stamp where it is always within easy reach, I attach a string to the top railing of the prescription desk. To the end of the string



I fasten a dozen rubber bands and to the end of these I attach the stamp. When the stamp is needed, pull it down, use it, and let go. It will spring back out of the way.

PROFITS AND EARNINGS

A BRITISH COLUMBIA BUSINESS.

A druggist in British Columbia submits the following statement for analysis:

	1910	1911
Stock	\$2476.77	\$3270.95
Fixtures	1625.02	1625.02
Purchases		4886.27
Clerk's salary		780.00
Proprietor's salary		1800.00
Rent of store.....		720.00
Telephone		50.00
Light		75.00
Fuel		40.00
Taxes and insurance.....		100.00
		<u>\$3565.00</u>
Total cash sales.....	8971.05	

This individual is doing extremely well. He is paying his clerk \$65 a month and is drawing \$150 a month salary out of a business of somewhat less than \$9000 a year. In addition to that he increased his stock from \$2476.77 in 1910 to \$3270.95 in 1911, a gain of \$794.18 after all the expenses were paid. Of course the percentage of net profit is not high, due to the fact that the proprietor is drawing a somewhat comfortable salary considering the size of the business.

The ratio of net profit is \$794.18 divided by the sales \$8971.05, or 8.85 per cent. The ratio of expense is the total \$3565.00 divided by the sales \$8971.05, or 39.73 per cent. Every drug store should yield a net profit of 10 per cent on the sales if the business is properly conducted. The average expense of doing business for a druggist is 30. The reason why in this case the net profit is somewhat below standard and the expenses above it, lies in the fact that the proprietor is drawing a salary of \$1800 a year which goes into expenses. Ordinarily if a drug store does not yield 10 per cent net after all expenditures have been considered, the returns are insufficient.

AN INDIANA STATEMENT.

A proprietor in Indiana submits the following statement for analysis:

Sales, 1911	\$10,037.45
Inventory, Jan. 1, 1912.....	1,857.62
Expenses, 1911	3,000.00
Purchases, 1911	1,366.97
Proprietor's salary	1,000.00

Our estimates are as follows:

Inventory, Jan. 1, 1912.....	\$1,857.62
Inventory, Jan. 1, 1911.....	1,366.97

		\$490.65 Increased stock.
	1911	
Expenses	\$3,000.00	
Purchases	5,510.22	
		<u>\$8,510.22 Expenditures.</u>
Sales	\$10,037.45	
Expenditures	8,510.22	
		<u>\$1,527.23 Gross profit.</u>
Salary	1,000.00	
		<u>\$527.23</u>
		490.65 Increased stock.
		<u>\$1,017.88 Net profit.</u>

This man is doing very well, making a net profit of about 10 per cent a year. His stock increased \$490.65 during 1911, as is evident from a comparison of the inventories at the beginning and end of the year. He spent for help and goods \$8510.22. Subtracting this expenditure from the sales, \$10,037.45, we have left a profit of \$1527.23. Subtracting the manager's salary of \$1000 leaves a profit of \$527.23. To this should be added \$490.65, the increase in stock, giving a total net profit of \$1017.88. This is approximately 10 per cent of the sales. The percentage of expense of this pharmacist is about 30, which is the usual average.

A PROFITABLE BUSINESS.

A druggist located in a small Wisconsin town submits his business statements for the years 1910 and 1911. He adds: "I am doing a strictly cash business. I have no bad accounts, but I am losing money in not taking advantage of discounts. In the past I have never discounted a bill. But this year I have borrowed the money and will pay cash for everything that comes in the store. My expenses are large, as they include both those of my home and the store.

	1910.	1911.
Inventory	\$3875.15	\$3806.04
Sales	9648.82	\$265.89
Purchases	5868.93	5003.41
Expenses	2402.71	2484.40
Debts	1191.76	1125.50

Our own opinion is that this proprietor should have retrenched a bit on seeing that

his sales were falling off. As a matter of fact his expenses were over 80 dollars more during 1911 than 1910. In an off year economy should be the watchword. His sales were \$1381.93 less in 1911 than in 1910. Naturally this affected his profit, as is evident from the following simple calculations:

	1910.	1911.
Purchases	\$5868.93	\$5003.41
Expenses	2402.71	2484.40
<hr/>		
Total disbursement...	\$8271.64	\$7487.81
Sales	\$9648.82	\$8265.89
Disbursement	8271.64	7487.81
<hr/>		
Net profit.....	\$1377.18	\$778.08

His net profit, as is shown in the foregoing figures, was \$1377.18 in 1910, but only \$778.08 in 1911, a decrease. He has not reduced his indebtedness substantially. True, he owed \$66.26 less in 1911 than 1910, but then his stock was \$69.14 less.

Still our Wisconsin friend is doing very well. In 1911 his percentage of net profit was $\$778.08 \div \8265.89 , or 9.41 per cent. In 1910 it was 14.27 per cent, as may be seen by dividing the net profit of \$1377.18 by the sales for that year, \$1377.18. Obviously his earnings have fallen off, but it is to be hoped that 1912 will see the business resume its former proportions.

Speaking of earnings, it is hard to tell how much our friend is making because he doesn't itemize his expenses. If they are in the main personal, he is doing very well. They must include his salary. The store expenses should be itemized and be differentiated from the household expenditures, so that we could tell where our friend is at.

His determination to discount all bills even if he has to borrow the money to do it is, of course, very commendable.

A NEW STORE.

An Oklahoma pharmacist bought a new store not long ago. After nine months, he showed the following statement:

Bills receivable	\$ 127.50
United Drug Co. stock.....	100.00
Stock	1943.17
Fixtures	1649.70
Cash	160.00
Bills payable	749.91
Note at bank.....	800.00

Labor account	224.05
Personal account	602.45
Expense account	693.20
Expense account, soda fountain.....	85.25
Goods purchased, including fixtures.....	6849.32
Freight account	175.81
Cash discount	36.17
Cash sales	5787.00
Cash invested, including above note of \$800.00.	2441.10

We have divided this statement, for the purpose of convenience, into three parts: assets, debts and expenses. In the assets we include:

\$ 127.50 Bills receivable.
100.00 United Drug Co. stock.
1943.17 Stock.
1649.70 Fixtures.
160.00 Cash.

\$3980.37 Total assets.

The debts comprise bills payable \$749.91 plus the bank note \$800.00, totaling \$1549.91.

The expenses consist of:

\$ 224.05 Labor.
602.45 Personal.
693.20 Expenses.
85.25 Fountain.
175.81 Freight.

\$1780.76 Total expenses.

Subtracting the debts from the assets, \$3980.37 less \$1549.91, gives \$2430.46 net assets or the man's equity in the business. Since he invested \$1641.10 of his own money in the business, we subtract that amount from his assets to get the profits. In other words, \$2430.46 minus \$1641.10 equals \$789.36, the gain for the year. His personal investment was determined by subtracting the amount of his bank loan from what the statement shows was invested; or \$2441.10 less \$800.00 equals \$1641.10. He allowed himself about \$77 a month salary the first nine months.

Dividing the expenses by the sales, \$1780.76 divided by \$5787.00, equals 30.77%. Freight might better have been charged to purchases, as it is part of the cost of the goods. His percentage of profit ran 13.64, as may be seen by dividing \$789.36 by the sales \$5787.00. Considering that he allowed himself a fair salary, this proprietor has done very well. A profit of 13.64 per cent is very good for a new business or even for one long established.

If the sales develop and the percentage of profit be maintained, this proprietor should have a good stand some day. JNO. H.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

TINCTURE OF IODINE.

To the Editors:

In the February issue of the BULLETIN, on page 49, I read an editorial about certain preparations which had been found not up to U. S. P. standard. Having noticed that tincture of iodine was one of the preparations under fire, I offer the following suggestion for the manufacture of this well-known article.

The fact that such a large percentage of tincture of iodine samples examined were found below U. S. P. standard leads me to believe that the iodine and potassium iodide were in most cases not entirely dissolved when the tincture was sold or offered for sale. There is no doubt in my mind that the usual way in which tincture of iodine is made is as follows: The required amounts of iodine and potassium iodide are placed in a bottle and enough alcohol added to make the proper volume of tincture. The bottle is then shaken a few times and set aside with the expectation that in a short time all of the solids will have dissolved. A few shakes of the bottle, it is assumed, are all that is needed to produce a U. S. P. tincture of iodine.

There never was a grosser error. I know from experience gathered by conducting experiments that iodine and potassium iodide will dissolve very slowly when treated in that way. I have seen cases where the iodine and potassium iodide remained undissolved in a bottle of alcohol even after they had been mixed for a period of two weeks, and the mixture had occasionally been agitated. Having learned this I decided to try the following method for obtaining a full-strength tincture of iodine:

A glass funnel of suitable size was placed in the neck of an accurately graduated bottle and a pledget of cotton moistened with alcohol was placed in the neck of the funnel. The required amount of potassium iodide, 50 grammes for 1000 Cc. tincture, was weighed and placed on top of the cotton. The required

amount of iodine, 70 grammes for 1000 Cc. tincture, was next weighed and placed on top of the potassium iodide. Alcohol was then poured over the mixture in the funnel and allowed to percolate through the mixture into the graduated bottle until the proper volume of tincture of iodine had been obtained.

By the use of this method 1000 Cc. of a perfectly clear, clean, and strictly U. S. P. tincture of iodine can be obtained in about half an hour. I advise every pharmacist who has had any difficulty in preparing a satisfactory tincture of iodine to try the foregoing method.

E. A. GEYER.

South Bend, Indiana.

SOME HELPFUL DISPENSING HINTS.

To the Editors:

In making Churchill's tincture of iodine I use the glass barrel of a vaginal syringe. Dissolve the tincture of iodine in the smallest amount of water, add alcohol, put the iodine in the tube, and let circulatory displacement do the work. In that way one does not use any time to rub up the iodine, nor does he leave part of it in the mortar. After standing out for a while in a warm place, or over night, the iodine is all dissolved. Immerse the tube only about $\frac{1}{4}$ inch in alcohol.

Some time ago I saw an article about citrate of magnesia keeping well by adding half of the potassium bicarbonate at once, and corking the bottle until called for; then adding the remainder. I have tried this plan and found it does very well. The slight amount of gas generated prevents the flocculent growth which is apt to form when the potassium bicarbonate is omitted entirely.

I use small rubber bands for putting up bundles of six or seven powders, before placing them in the box, and thus save the patient's temper by not having 20 or 30 powders flying out of the box when he tries to get one out. I use the bands for bottle caps also. They save a lot of time and look better than thread or string.

In dissolving bromides, I dissolve the salt in a little distilled water, then add medicated water or use all distilled water, and add the oils and shake. Either way makes a clear solution, but the latter method requires running the fluid through a filter or cotton to take out the excess oil.

When receiving a new bottle of acid, I take time to open it by warming the neck in a Bunsen flame or friction against string, instead of waiting until I have a call for the acid. This saves time and prevents broken bottles. Trying to open the package while customers wait is very apt to result in broken stoppers or bottles, or both. And since most jobbers charge 15 to 25 cents for bottles, this precaution helps buy a few more cigars, or maybe some shoes for the baby.

I read the BULLETIN when it arrives here and think I get more good things from it than from any other journal! C. A. SIEPLEIN.

Cleveland, Ohio.

FROM A SICKA DA MAN.

To the Editors:

I am sending you herewith an amusing letter which I picked up recently in a store

*Dear sir —
I will sent you the
address, to Themistocly Milloma
If you please sent me
a madison that thing you
give before, becouse sore
my chest.
Yours truly*

which has quite a large Italian trade. Evidently it came from a "sicka da man."

Roxbury, Mass.

J. E. MULLEN.

HE HAD TO BE CONSISTENT.

To the Editors:

While forwarding my subscription, let me relate an amusing incident that occurred recently in our pharmacy.

A lady entered one afternoon leading a dog that she wished us to kill, as it had become a nuisance. It appears that the corporation official had not been highly polished in his manner towards her, and that, together with the grief at parting with a family pet, made her more than ordinarily excited, or shall I say concerned? Poor body, she desired to know whether the dog would die, and whether she could be thoroughly assured it would not come home again.

We assured her the dog would die quickly,

and that death would be painless. Right. We killed the dog with prussic acid, and had no more than finished the unpleasant duty when the messenger boy came out to the back saying, "Shop, sir, a lady wants you."

Without waiting to wash my hands I went straight to the counter, and sure enough, there was a lady, but different from the former. The new arrival informed us she was collecting on behalf of "The Cruelty to Animals Association." Well now, that was a contradiction to all of my doings. I'm past the blushing stage, but can still see the humorous side of the question, and told the energetic collector of my latest action, saying I could not see my way clear to subscribing as by so doing my donation would be in direct opposition to my action. However, the lady collector was very much concerned, and said she would call another day.

CHAS. PALLISER.

Wellington, New Zealand.

A RUSSIAN READER HEARD FROM.

At intervals we receive communications that serve to show the world-wide circulation of the BULLETIN. Recently, for example, the Walrus Manufacturing Co. forwarded to us a post-card received from one of our Russian readers. We take pleasure in reproducing it:

*Walrus Manufacturing Co., Vsevolod H.
Dear Sirs,
Referring to your advertisement
in the Bulletin of Pharmacy, kindly send
your catalogue of Soda Fountains Carbonates,
Metal Furniture and Ice Cream Cabinets.
very truly yours
10.11.1912. O. Schuessler
Road, Russia
78, Konstantin Street*

Commenting on this inquiry from far-off Russia, the Walrus Manufacturing Co. writes:

THE BULLETIN OF PHARMACY,
Detroit, Mich.
Gentlemen:

The enclosed inquiry should be of interest to those who are advertising in your publication.

We get more foreign inquiries through THE BULLETIN OF PHARMACY than from all other trade journals.

Yours truly,

WALRUS MANUFACTURING Co.,
L. G. Gray, Sec'y and Gen'l Sales Mgr.

Verily the BULLETIN OF PHARMACY is a world journal.

SHE WANTED THE COATS ON!

To the Editors:

I have greatly enjoyed the funny orders which have been appearing in the BULLETIN OF PHARMACY during the last five or six years. The other day a child wanted a box of Brandreth's pills. Without asking her any

These Pills are so
old that the country
is falling off them.
Please charm them
Look in in Box

questions, I gave her the uncoated pills. They were promptly returned with the enclosed note. This ought to make a pretty good State board catch question! JOSEPH A. SCHMIEG.

Philadelphia, Pa.

ANOTHER MAN BELIEVES IN IT!

To the Editors:

I have read several letters in the BULLETIN OF PHARMACY suggesting the establishment of a druggists' death benefit association. I also observed your editorial in the January number. I think this is an excellent idea, and I am sure a number of other druggists feel the same way about it. Merely thinking about a good thing, however, doesn't accomplish much. *Doing* is what counts.

I am interested in knowing how many of your readers think favorably of this plan. I would like to know how many of them would go into it, and what their ideas in regard to it are.

A. W. MEIER.

Van Buren, Ark.

A CONUNDRUM.

To the Editors:

I cannot resist the temptation to ask you a query: Why is an up-to-date pill-twirler like a hunter attacked by a tiger? Because both must get their bullet-in.

North Paterson, N. J. MAXWELL BUKOFZER.

FLORAL DEPARTMENT.

We want to say that we enjoy very much reading the BULLETIN. We consider it the best magazine that comes into our establishment.

KANE DRUG COMPANY.

Kane, Pa.

I find the BULLETIN the climax of magazines pertaining to pharmacy, and every number is a source of valuable information to me.

Aylmer, Ontario.

E. A. RICHARDS.

We get more information and general knowledge from the BULLETIN than from any other magazine which we receive.

Morgan Hill, Cal.

HUBERT H. BEARCE.

I have been a subscriber to your journal for the last two years and will never be without it.

Passaic, N. J.

B. ROOD.

The BULLETIN is the liveliest paper I get, and I miss it sadly when it does not reach me.

Eltham, Tarawaki,

MORITZ MARK.

New Zealand.

The BULLETIN OF PHARMACY is the best little drug journal published!

Detroit, Mich.

J. F. PADDOCK.

I find the BULLETIN very interesting and do not wish to be without it.

EDGAR L. HOLDEN, Ph.C.

W. Philadelphia, Pa.

I consider the BULLETIN the best of all monthly magazines I read.

Chicago, Ill.

ANTHONY J. ORTH.

Oh, you BULLETIN! How could we ever keep house without you!

Maywood, Ill.

WAKEFIELD'S.

Find enclosed 12/- subscription for best pharmacy journal known!

T. WALKER.

Winton, N. Z.

Your BULLETIN is as welcome as the flowers in May!

LIEN'S PHARMACY.

Tacoma, Wash.

Your journal is worth many times the price to me.

W. H. LAUD.

Gilliam, Mo.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Snowed In.—

The weather during the past winter was unusually severe. When the rigor of the February cold began to abate, up came a blizzard that fairly crippled the west. There was a heavy snow fall, which, aided by high winds, formed huge drifts, and in many places traffic was completely blocked.

Frank G. Farrell, who conducts a drug store in



Munising, Michigan, on Lake Superior, came down to the store one morning and found that two people had shoveled their way through the snow-bank to gain entrance to his store. Lest some of our southern friends are inclined to doubt this statement, we produce the accompanying illustration of Mr. Farrell's store shortly after the snow-storm. Unfortunately the shovelers were disappointed in not being able to discover a night clerk and were compelled to wait until Mr. Farrell arrived. This only goes to show that you can't keep



the people away from a good drug store. Mr. Farrell took advantage of the opportunity to place a sign on the top of the snow-bank, as shown in the engraving.

In the west the blizzard was equally severe. The Santa Fe and Rock Island, and in fact all the railroads, and the through California trains, were held up several

days. It is needless to add that customers of the druggists had considerable difficulty in making their way to the stores. In many cases the snow was piled as high as the second story.

A First-class Soda Ad.—

L. L. Bunnell, proprietor of the Norwood Pharmacy, of Norwood, Ohio, upon the annual "opening" of his soda fountain, distributed a copy of an announcement to every house in the town. There were four pages, the paper being a heavy white stock four by six inches in size. On the top of the cover page was embossed the word, "Announcement." Underneath appeared the invitation:

Bunnell

Invites you and the members of your family to be present at his
NEW SODA FOUNTAIN
OPENING

Thursday, June 29, 1911

N. W. Cor. Main & Maple Aves.

Our newly installed Soda Fountain is the finest, largest and best equipped fountain in Norwood, and on that day we will serve Ice Cream and Soda free to our visitors.

The inside pages contained a soda menu, while the back cover read as follows:

In presenting this invitation to you, we desire to express our appreciation of your friendship and patronage in the past. We have aimed to furnish you with the best and purest drugs, the highest quality of drug sundries, and in every way endeavored to merit your good-will.

This drug store is your drug store and our services are yours for the asking. We have had this model soda fountain built so that you can say that Bunnell has the best drug store, the finest soda fountain and the best soda that can be found in Norwood. So when you want pure drugs or soda—

"Get it at Bunnell's"

This announcement proved a winner and brought a lot of new faces to the store.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Pregnant Paragraphs.—

Rayleigh says that the blue color of the sky is due to the dispersion of the sun's light by the molecules of the air.

French chemists state that the latent heat of fusion of the fatty acids is higher than the latent heat of solidification.

Norwegian chemists have been studying the aurora borealis, and ascribe it to radioactive substances from the sun.

Iodine stains (on cloth, etc.) may be removed with hydrogen peroxide and ammonia water, three parts of the former to one of the latter being the best proportion.

Tartar on the teeth, M. Boville says, consists of carbophosphate of calcium. He says that dentifrices containing soap favor its deposit, while acid dentifrices prevent or remove it.

Acetanilide, antipyrin, and phenacetine are found to raise the freezing point of blood serum for a time after their administration.

Urethan is found to intensify the anesthetic influence of opium, beyond its own anesthetic action.

The Royal Commission on Tuberculosis has decided that much of the tuberculosis of children is due to milk containing tubercle bacilli, and that man is susceptible to the bovine bacillus.

An oil has been found in apple-peel to which the odor is due. The peel also contains a wax which protects the apple from wet.

A new process for obtaining radium makes low-grade ores available for obtaining it, and gives a yield in six weeks' treatment.

Thirty million ounces of silver are used annually in photography in the United States. But little of this is recovered.

Alcohol in chloroform does not prevent the decomposition of the chloroform by light, but renders the products of decomposition harmless. The only way of protecting chloroform is to exclude the actinic light.

Ferric salts in presence of light decompose citric and lactic acids, forming acetone and carbon dioxide. The latter effervesces and has led to suspicion of fermentation in elixirs containing these ingredients.

Strophanthin and saponin lose their properties when exposed to strong sunlight.

By treating the drinking-water in Cincinnati the typhoid rate has been reduced 83 per cent and the death-rate 70 per cent in three years.

Ozone is soluble in distilled water only to the extent of 1 part in 10,000 at 2° C., and 1 in 60,000 at 28° C. Some neutral salts increase the solubility.

Diamonds have recently been discovered in British Columbia; also platinum, but the latter is not in paying quantities.

Diphenylmethane has the characteristic odor of geranium, and is used as the basis of artificial geranium oil.

By treating pure water, free from gases, with ozone and an electric current, it is claimed that hydrogen peroxide having a strength of nearly 475 volumes can be produced.

It is said that the sap of the nipa palm, grown in the Philippine Islands, is the cheapest source of alcohol in the world.

Antipyrin combines with ferric chloride and with ferrous chloride, forming definite compounds which dissolve in alcohol or in water and yield a red solution.

About Enzymes.—

Pure rennin in a solution containing a little glycerin is rendered inactive by shaking, but on standing in the same container a part of its activity is restored. If no glycerin is present shaking does not appear to affect it. Commercial preparations of rennin, containing boric acid and sodium chloride, are not destroyed by shaking.

U. E. Porter finds that an artificial membrane renders most ferments (except taka-diastase) inactive by contact, and that this is not due to absorption, but to a change in the enzyme by contact. He suggests that this may be the real explanation of how the human body rids itself of the enzymes which it is constantly producing—i.e., why the stomach itself is not digested.

Ointment Bases.—

Bartels & Van der Wielen have studied the water-absorbing power of ointment bases, and offer the following information: Petrolatum alone absorbs 20 per cent of its weight of water. With 2.5 per cent wax it absorbs 38 per cent; with 5 per cent, 42 per cent; and with 10 per cent, 35 per cent. With 2.5 per cent of spermaceti it absorbs 30 per cent; with 5 per cent, 40 per cent; and with 10 per cent, 35 per cent. With 2.5 per cent of wool-fat, it absorbs 80 to 140 per cent, depending upon the rate of addition; with 5 per cent, 100 to 240 per cent; and with 10 per cent, 140 to 288 per cent. The addition of phenols, particularly resorcin, they find to decrease greatly the water absorbability.

Where We Get Our Electricity.—

When yeast induces fermentation in sugar solutions, it is found that a considerable electrical current is induced which passes from the yeast to the sugar. In a 10-per-cent solution of glucose containing 3 Gm. of yeast in 100 Cc. a current of 0.3 volt was measured in seven minutes, which gradually decreased. Similar results were observed in the action of diastase on starch, and in the action of the coli bacillus on asparagin. All the experiments showed that electrical energy is liberated when microorganisms act upon organic bodies.

The Age of the Earth.—

J. Joly says that there are three ways of estimating the age of the earth. By estimating the amount of sodium chloride in the ocean and comparing with the amount carried annually by the rivers, the earth is calculated to be 80 to 150 million of years old. By estimating the amount of sediment from rock-decay, etc., the calculation is 148 million years. By calculation from radioactive changes, and the estimation of helium or lead in rocks, the earth is calculated to be 715 to 1640 million years old.

About Alcohol.—

R. Rosemann says that all but 2 per cent of alcohol, taken into the stomach, is utilized as a food, but that the food value of alcohol is very small because of its other effects. It dulls sensations, and thus tends to disarrange vital functions; it arrests hunger and leads to malnutrition; it numbs the nerves and brings danger from abnormal temperatures, fatigue, enervation, etc. He considers alcohol as an effective but very dangerous food, when improperly used.

Imitation Perfumes.—

The higher aldehydes are being used in perfumery to an increasing extent. Nonyl aldehyde is used in lilac and rose perfumes, octyl aldehyde in jasmine, narcissus, hyacinth, and jonquil, and duodecyl aldehyde is assuming an important place in violet perfumes. The latter is used in proportion of 5 to 10 per cent of the ionone employed, and is said to produce an infinitely superior bouquet.

Silk Mantles, Not Robes.—

Gas mantles made from artificial silk are found to be stronger and more durable than mantles made from cotton or ramie. Microphotographs show that the artificial silk fibers remain unbroken under action of the heat, while the others break. In practical vibration tests an artificial silk mantle was found to last seven weeks on a burner which destroyed a ramie mantle in six days.

Some Molecules!—

Professor Sang says that 1 Cc. of hydrogen is calculated to contain about 525 octillion of molecules. If ten thousand of these are allowed to escape every second, it would take seventeen quintillion (17,000,000,000,000,000,000) of years to empty, and Lord Kelvin has ascribed to the ether of space a weight of one-billionth gramme per cubic meter.

Own Up!—

The scarcity of Bulgarian oil of rose and the consequent high prices have induced the smuggling of oil

of geranium as an adulterant into that country to such an extent that the authorities propose that its use as an adulterant be allowed and recognized. The 1910 crop was only half that of 1909, and the 1911 crop is smaller still.

Murder Will Out!—

Capillary analysis is a new form of operation by which certain poisons are detected in very minute quantities in the presence of large amounts of other matter. The instrument used is called the stalagmometer, and it is sensitive to 1/6500 grain of many metals. It is more rapid than the usual method of chemical analysis.

What Not to Drink!—

Dr. Whitney says that the toxic effects of alcoholic beverages is due in part to other substances than alcohol, and that various liquors reduced to the same per cent of alcohol vary markedly in their toxic action. Wines are the most toxic, malt beverages come next, and distilled liquors are least toxic.

Adrenalin as an Antidote.—

Adrenalin in 1-in-1000 solution is stated by Jona to be an efficient antidote for cyanide poisoning. About half an ounce should be given, followed by iron hydroxide. The adrenalin is stated to retard absorption of the poison, and can be used for this purpose in other forms of poisoning.

Can Be Done.—

That sulphuric acid can be manufactured by passing the sulphur dioxide gas into towers, similar to the Glover towers used for nitric acid, is proved by the successful operation of such a plant in Austria. They are more compact and appear to be more economical than the lead chambers.

Not So New.—

The distillation of turpentine from pine and spruce stumps was begun in Sweden 40 years ago, but has not proved very successful on account of the persistent burnt odor in the product.



AN ATTRACTIVE CANDY WINDOW.—This display of box candy, enlivened by the presence of several wax figures, appeared recently in the window of one of the Owl Drug Company stores in Seattle, Washington. On the left is represented a theatre box where a little girl is just helping herself to a chocolate. On the right is the scene of a home. The housewife standing beside the table is evidently opening a box of candy. Choice confections appear everywhere on the floor and on the walls. Price cards indicate the different packages for sale. The trim was arranged by J. A. Barlow and proved of unusual interest.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Bedbug Exterminators.

S. W. K. wants a formula for a bedbug exterminator that will not stain and does not contain mercuric chloride:

Naphthalin1 ounce av.
Gasoline16 fluidounces.

Mix and dissolve.

This is efficacious and is dangerous to use, on account of the inflammability of the gasoline. This mixture, it is said, may be used indiscriminately on bedding, furniture, textiles of all descriptions, wall-paper, etc. It may be improved by adding one ounce or so of paraffin wax, which acts by forming a coating over the eggs of the insects and preventing their hatching out.

A good bedbug killer is benzine, pure and simple, or mixed with a little oil of mirbane. It evaporates quickly and leaves no stain. The only trouble is the inflammability of its vapor.

The following is a popular preparation: To half a gallon of kerosene oil add a quart of spirit of turpentine and an ounce of oil of pennyroyal. This mixture is far less dangerous than benzine. The pennyroyal as well as the turpentine is not only poisonous but exceedingly distasteful to insects of all kinds. The kerosene while less quickly fatal to bugs than benzine is cheaper and safer, and when combined with the other ingredients becomes as efficient.

Where the wall-paper and woodwork of a room have become invaded, the usual remedy is burning sulphur. To be efficient the room must have every door, window, crevice, and crack closed. The floor should be wet in advance so as to moisten the air. A rubber tube should lead from the burning sulphur to a key-hole or auger-hole and through it, and by the aid of a pair of bellows air should be blown to facilitate the combustion of the sulphur.

Here are two good formulas that can be depended upon:

- (1) Oil of pennyroyal.....1 drachm.
Turpentine8 ounces.
Kerosene oil, enough to make 1 gallon.

Put up in 8-ounce bottles as a bedbug exterminator.

- (2) Oil of eucalyptus.....1 drachm.
Eucalyptus leaves1 ounce.
Benzine2 ounces.
Turpentine2 ounces.
Kerosene, enough to make.....16 ounces.

Mix the turpentine, benzine, and kerosene oil, and macerate the eucalyptus leaves in it for 24 hours; then strain and make up the measure to 1 pint, having first added the oil of eucalyptus.

Label for Horse Colic Remedy.

R. B. writes: "We are going to sell a horse colic remedy of the following formula:

Tincture of opium.....1 fluidounce.
Spirit of turpentine.....2 fluidounces.
Raw linseed oil, enough to make 16 fluidounces.

"How must our label read to conform to the Pure Food and Drugs Act?"

Attorney Charles M. Woodruff, to whom we have referred your query, answers as follows:

"The pure food and drug laws do not dictate how one must label a drug product except in the matter of stating the quantity of certain ingredients if they are contained in the formula. For example: Your formula contains tincture of opium, the quantity or proportion of which should be stated upon the label.

"The law forbids and prescribes suitable penalties for the adulteration and misbranding of drugs, and then defines the terms 'drugs,' 'adulteration,' and 'misbranding.' For example: Your remedy would be adulterated if you sold it under a name recognized in the U. S. P. or National Formulary and it differed from the standard of strength, quality, or purity as determined by the test laid down by these authorities, unless the actual strength was stated on the package; or, if the strength and purity are stated on the package and the drug fall below the professed standard of quality under which it was sold.

"It would be deemed misbranded if the label contained any statement regarding the article or any substance or ingredient which was false or misleading in any particular, or if it was falsely branded as to the State, Territory, or country in which it is manufactured or produced; and again if it is an imitation of or offered for sale under the name of another article; again, if the quantity or proportion of alcohol is not stated upon the package."

Mimeograph Inks.

I. H. S.—For use with any kind of a stencil, ink must necessarily be thick—more like a paste than like writing fluid—and it would apparently be best to use for the coloring agent some substance not soluble in the liquid employed to carry it, as it would then have less tendency to "creep" under the edges of the stencil and so spoil the impression. To grind a pigment fine enough for the purpose would be quite laborious, if done by hand, but colors may be obtained in the market ground in water, under the name of "distemper colors." An addition of gum arabic or dextrine mucilage would be necessary to hold the pigment to the paper on drying, and a very small quantity of glycerin would prevent the mixture from drying too readily. Aniline colors, ground with dextrine mucilage, can also probably be made to answer. The ink used for mimeograph copying process is of a pasty character, and almost any good stencil ink will answer the purpose. A few formulas follow:

- (1) Shellac, 2 ounces; borax, 2 ounces; water, 25 ounces; gum arabic, 2 ounces; and of Venetian red, lampblack, Prussian blue, or any desired coloring substance, a sufficiency. Boil the shellac, borax, and some water until they are dissolved; add the gum arabic, and withdraw from the fire. When the solution has

become cold, complete to 25 ounces with water and more of the coloring substance to bring the ink to a suitable consistency.

(2) Printers' ink, made thin, is used on the mimeograph. The manufacture of inks of this type calls for a considerable amount of experience and skill. As much depends on the manipulation as upon the formula. The basis of printers' ink is a good quality of linseed oil, thoroughly boiled. It is boiled until it smokes, then ignited, allowed to burn about half an hour, then smothered, and again boiled until it can be pulled out into strings about half an inch long. Then a little rosin is added, and some soap, and the whole is boiled again, after which the pigment, usually lampblack, is thoroughly incorporated by machinery. The amount of rosin and soap to be incorporated varies with the conditions of use, and governs the consistency of the ink. The pigment must be very thoroughly triturated in to get good results.

(3) A simple substitute formula is the following: Copaiba, 9 ounces; lampblack, 3 ounces; indigo, 5 drachms; Prussian blue, 5 drachms; Indian red, 6 drachms; yellow soap, dried and powdered, 2 or 3 ounces. These must be very thoroughly triturated together. The consistency, which is an important feature of this kind of ink, may be controlled by the quantity of soap used.

Sticking Labels on Tin Containers; Painting Tins.

G. A. S. writes: "I am having lots of trouble in making labels stick to my drug cans. I have tried several different methods of sticking them without obtaining satisfactory results. Do you know or could you suggest some way they could be put on which would make them adhere? Can drug cans be painted so as to make them look well? If so, kindly inform me which would be the color most suitable and how to apply the paint."

Here are two schemes borrowed from a book entitled "350 Dollar Ideas for Druggists." H. V. Lott, of Canton, Illinois, says: "To make a label adhere to a tin box, proceed as follows: Rub two or three drops of tincture of myrrh on the surface of the container, let the box dry, and then apply the label in the usual way. I have used this method for five years, and no box has ever been returned to my store without the label still sticking to it."

S. L. Weyandt, Ph.G., Trafford City, Pa., advises: "To stick a label on the tin or aluminum caps of ointment boxes, or on tin of any kind, put a few drops of tincture of benzoin compound on the surface and apply a lighted match. When the burning ceases, apply a dry gummed label. It will stick for all time."

Replying to your second query, if the drug cans are clean, any paint can be applied. Use a fresh paint. Furthermore, it should be flat or free from oil. After painting the tins, a gloss may be obtained by applying a layer of varnish.

Lemon Cream.

C. H. H.—Supplementing what we had to say last month on the subject of lemon cream, we print the following borrowed from the *Montreal Pharmaceutical Journal*:

"As a woman grows older the sebaceous secretions diminish and her face needs oil or skin food. For this there is nothing better than a lemon cream made of almond oil, six ounces; white wax, ten drachms; spermaceti, ten drachms; lanolin, three ounces; oil of lemon, two drachms; elder-flower water, six ounces; witch-hazel, two ounces; tincture of benzoin, one drachm.

"Put the spermaceti, white wax, almond oil and lanolin all in a double boiler, and when they are warmed sufficiently take the mixture from the fire and beat in the elder-flower water, in which the lemon, witch-hazel,

and the benzoin have been added a few drops at a time. This must be done carefully or the cream will separate. It is healing, cleansing, and whitening."

Van Swieten's Solution.

M. B. L. writes: "Can you furnish me with the formula of Liquid Van Seviton? It is prescribed by one of the local physicians, who claims it to be a pharmacopœial preparation. I have carefully looked over the U. S. P., N. F., U. S. Dispensatory, and all other available literature that I was able to procure on pharmacy and pharmaceutical preparations and find no mention of it."

We do not find Liquid Van Seviton. If you mean Van Swieten's solution, in Remington's Practice of Pharmacy appears the following formula:

Corrosive chloride of mercury.....15 grains.
Alcohol, 80 per cent.....3½ fluidounces.
Distilled water, sufficient to make 32 fluidounces.

A tablespoonful contains nearly ¼ grain of corrosive chloride of mercury.

The New Standard Formulary gives the following formula:

Mercuric chloride.....7½ grains.
Ammonium chloride.....15 grains.
Alcohol.....2 fluidrachms.
Orange flower water.....8 fluidounces.
Distilled water, to make.....16 fluidounces.

Dissolve the salts in 1½ fluidounces of water, and add the other ingredients. This solution should be kept in dark or amber-colored bottles.

Several of the European pharmacopœias give formulas for Van Swieten's solution, but there is apparently some difference between them. Mercuric chloride, however, is the chief ingredient in each one.

Transferring Engravings to Paper.

T. H. L. wants a formula of a good transferring fluid, something that can be used for either fabrics or paper.

The liquid used for this purpose may be made by dissolving 1½ drachms of common yellow soap in 1 pint of hot water, adding, when nearly cool, ¾ fluid-ounce of spirit of turpentine and shaking thoroughly together. Apply the fluid liberally to the surface of the engraving or other printed matter with a soft brush or sponge, being careful not to smear the ink, which soon becomes softened, and allow it to soak for a few minutes. Then damp well the plain paper on which the transfer is to be made, place on it the engraving, and subject the whole to a moderate pressure for about a minute. On separating them a reversed transfer will be found on the paper. The transfer will not be equal in intensity to the original, as only a part of the printer's ink is removed. If the ink be very old, a longer soaking and more pressure may be necessary.

We do not know whether this process can be used on fabrics as well as paper, but you might try it.

Several Queries.

E. P. submits the following request: "Please give me the full derivation of the words pyroxylin, colloxylin, xyloidin, and collodium. I also want an easy method for the assay of pyroxylin if there is one, and

any history beyond that given in the National Dispensatory."

Pyroxylin is derived from the Greek, $\pi\upsilon\rho$, fire, and $\xi\upsilon\lambda\omicron\nu$, wood; xyloidin from $\xi\upsilon\lambda\omicron\nu$, wood, and $\epsilon\iota\delta\omicron\varsigma$, form; collodium from $\kappa\omicron\lambda\lambda\omega\delta\eta\varsigma$, glue-like. See Gould's Dictionary of Medicine.

We can find no method of assaying pyroxylin. You might make a nitrogen determination by the Kjeldahl method, but that is not exactly easy. Is it possible you have in mind the determination of pyroxylin content in an ethereal solution? In that event you could evaporate off the solvent and weigh the residue.

We have consulted several chemical works for the history of pyroxylin, but find they add little to what is published in the National Dispensatory.

An Interesting Incompatibility.

E. D. D. submits a very unusual query. It seems he received the following prescription:

Ammoniated mercury	5 grains.
Salicylic acid	5 grains.
Ointment of rose water.....	1 ounce.

Mix.

He filled the prescription and dispensed the salve in a glass jar with an aluminum lid. The customer returned the jar to the physician, claiming that it was hot and burned his fingers.

Prof. W. L. Scoville, to whom we have referred this query, offers the following explanation: The trouble is due to the action of the aluminum on the mercury salt. The latter is reduced and an amalgam forms, the mercury uniting with the aluminum. Then this appears to be acted upon by the water in the cream and aluminum hydroxide formed in presence of air.

The aluminum cover should be protected thoroughly by parchment paper.

Quinine Precipitated.

T. M. W. submits the following physician's prescription for a hair tonic for criticism:

Mercuric chloride.....	7 grains.
Resorcin	2 drachms.
Quinine	2 drachms.
Oil of tar.....	1½ fluidrachms.
Tincture of cantharides.....	1 fluidrachm.
Tincture of green soap.....	¼ fluidrachm.
Alcohol, enough to make.....	8 fluidounces.

He wants to know, too, whether it should be labeled poison.

A precipitate of quinine is thrown down by the mercuric chloride. Since this hair tonic is a prescription written by a physician, it need not be labeled poison unless the doctor so directs.

Clarifying Compound Elixir of Taraxacum.

O. A. R. has been having trouble with Elixir of Taraxacum Compound N. F. He says: "I get a precipitate, a cloudy, muddy mixture, every time I must send out a prescription containing it. I have tried filtering the elixir through paper, pumice, magnesia, precipitated calcium carbonate, and purified talc. After about 2 ounces filter through any one of these mediums, the filter becomes clogged. Can you tell me what to do to get a clear filtrate?"

No. We can't see any help for you. This elixir is made from fluidextracts of the kind that are inclined to precipitate badly. We have never yet seen it made and remain clear. The best suggestion we can offer is to decant or filter the elixir as it is needed. A filter paper should be sufficient without any other clarifying agent.

An Incompatible Prescription.

W. B. asks why a solution of potassium citrate in water effervesces when mixed with spirit of nitrous ether?

Prof. Wilbur L. Scoville, to whom we have referred this query, offers the following explanation: Aqueous solutions of potassium citrate, unless weak, will not mix with alcoholic liquids. In a combination with spirit of nitrous ether, the potassium citrate solution liberates the nitrous ether from its alcoholic solution, and the ether, boiling at 17° C. (62° F.), passes off just enough to appear as an effervescence. If the liquids be cooled well below 17° C. before mixing, no effervescence will occur, but the ether will be found floating on top of the liquids in a short time. The alcohol will also have separated from the mixture.

A Presentable Mixture.

A. J. D. requests us to criticize the following prescription:

Potassium iodide.....	2 drachms.
Tincture of gelsemium.....	2 fluidrachms.
Simple elixir, enough to make.....	4 fluidounces.

Mix and make solution.

In aqueous solution the potassium iodide would precipitate alkaloids from tincture of gelsemium, but when 20 per cent or more of alcohol is present, as in this case, the alcohol prevents precipitation. Save for a slight cloudiness, made by diluting the tincture, the prescription will be very presentable when compounded.

Dry Shampoo.

G. B. C. wants a formula for dry shampoo, one containing powdered orris root. The following mixture is suggested:

Powdered orris	6 ounces.
Fullers' earth	7 ounces.
Arrowroot starch.....	½ ounce.
Oil of lavender.....	1 drachm.
Alcohol	1 ounce.

The oil of lavender is dissolved in the spirit and sprayed on to the mixed powders.

Elixir of Cinchona.

F. P. H. wants a formula for an essence of calisaya alkaloids.

A preparation quite generally used is the following:

Quinine sulphate.....	30 grains.
Cinchonidine sulphate.....	15 grains.
Boiling water.....	8 ounces.

Dissolve and add:

Elixir aromatic U. S. P., to make.....	1 gallon.
Tincture of cudbear compound, q. s. to color deep red.	

Will some pyrotechnical expert answer the following query for one of our readers: "What chemicals when allowed to soak through cotton or a similar substance from opposite sides, ignite upon coming together?"

BULLETIN OF PHARMACY

Vol. XXVI.

DETROIT, MICH., MAY, 1912.

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THE BULLETIN OF PHARMACY

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THE MONTH'S HISTORY

N. A. R. D. AMENDMENT TO THE SHERMAN ACT. It has been known for some months that Frank H. Freericks, acting as the legal adviser of the N. A. R. D. in the illness of Judge Errant, was drafting an amendment to the Sherman act which would specifically permit retail dealers to act coöperatively in the protection of living prices. After a good deal of study and effort, together with assistance from the National Executive Committee, Mr. Freericks finally perfected his amendment and last month laid it before the Senate Committee on Interstate Commerce at a hearing specially secured by W. S. Richardson.

Mr. Freericks talked for some time before the committee, and he handled himself and the proposition ably. He declared that the Sherman act, while aiming to preserve free com-

petition, really destroyed free competition for the reason that it permitted large dealers to so cut prices and indulge in other tactics as to drive the small dealers to the wall and thus bring about a partial monopoly. The small dealers were prevented from protecting themselves by means of any combination of effort, for this was held to be restraint of trade within the terms of the act.

His proposition was to supplement the law with a number of sections giving labor organizations, producers, growers and retail merchants the right to "direct the concerted action of their members to prevent ruinous underselling tending toward monopoly and centralization of trade." To this end, so far as retail dealers were concerned, associations would be permissible and "members of such associations might agree among themselves and with individual manufacturers to secure the selling prices established by such individual manufacturers for their respective products." And in order that this right would not be abused, the amendment provides for adequate supervision either from a special governmental commission or from some bureau in the Department of Commerce and Labor.

Mr. Freerick's argument was that, unless retailers were protected in some such manner, they became the prey and victim of their larger and richer competitors; that equality of opportunity was therefore destroyed; and that in the long run it was "better for the country as a whole to preserve a condition under which the smaller man can continue."

* * *

NEW N. A. R. D. CONTRACT PLAN.

During the present session of Congress, however, all sorts of amendments to the Sherman act have been proposed, and the situation is in such confusion that nothing is likely to be done this year. The whole question indeed is more or less in chaos, but this is no reason why the drug trade should be in despair for the ultimate outcome. The act will in all probability

be amended in some form within the next year or two, and indeed the Sherman law was the one important political issue until Mr. Roosevelt threw himself into the breach a few months ago and brought constitutional questions into the foreground. Competition and its regulation, however, will be a paramount topic for many years to come, and the drug trade will be wise if it keeps itself in touch with the problem and does everything possible for its own protection.

In the meantime Mr. Freericks has also drawn up a new form of contract plan which we understand is a combination of the Miles and Boehm methods. We expressed the opinion editorially last December that it was exceedingly doubtful whether any sort of price protection would escape the prohibition of the present Sherman act. Evidently the National Executive Committee of the N. A. R. D. agreed with this view, for Mr. Freericks was instructed to draw up an amendment to the Sherman act prior to giving consideration to a new contract plan. Inasmuch, however, as there will be inevitable delay in amending the law, the N. A. R. D. has decided to go ahead and see what it can do in the meantime with the problem of price protection.

It is possible that even now some form of a contract plan might be drawn up which would not be held in contravention to the law. The effort is worth trying anyway. Mr. Freericks's plan is now in the hands of the Executive Committee for discussion, and it will be printed soon in *N. A. R. D. Notes*—possibly before this issue of the BULLETIN reaches its readers. As we have already suggested, however, we understand that the plan combines the agency assignment idea of the Miles method with the coupon feature of the Boehm scheme. The coupon idea makes for practical simplicity, and does away with a good deal of bookkeeping and inconvenience of one kind and another.

* * *

CONGRESSIONAL MATTERS.

Besides the Richardson bill, there are six or eight other measures pending in Congress to amend the food and drugs act or else affecting the drug trade in some other way. A hearing was to be held on all of these measures before the Interstate Commerce Committee of the House on April 23, but at the time of going to press we had not heard what the

definite results were, if any. It is doubtless too early anyway to say what the committee may decide to do. In the meantime the Richardson bill continues to be discussed from every angle in the drug press, the medical press, and even in lay journals. Everybody is agreed that the bill in its present form is a monstrosity, and that some modification is essential before it can be considered seriously. Just what this modification may be, and whether the various drug interests will come to an agreement concerning it, remain to be seen. So far as the tentative narcotic ruling of the government is concerned, hearings were held some weeks ago before the Board of Drug and Food Inspection of the Department of Agriculture, but at this writing no decision has been promulgated from the department.

* * *

THE ARTIFICIAL CULTIVATION OF DRUGS.

Dr. Rodney H. True, of the Bureau of Plant Industry of the Department of Agriculture, recently delivered an address at the annual meeting of the College of Pharmacy of the City of New York on the cultivation of medicinal plants. Dr. True made it plain that agriculture is absorbing more and more of the land formerly bearing native drugs. Golden-seal was cited as a striking example. Dr. True said that twenty-five years ago this drug was plentiful and the price low. Ginseng he mentioned as another example of a plant which has grown costly by reason of its scarcity. Blood-root, serpentaria and pinkroot have also become far less abundant.

Facts like these have stimulated study of the problem of growing these drugs by artificial cultivation. Dr. True went on to explain the various precautions that must be observed in cultivating drugs. Cascara seeds must be planted before they become too dry and molding must be prevented. Lobelia will come up in a year or a fraction of that time, depending on the season in which it is planted.

When it comes to the cultivation of foreign drugs, the work is far more complicated than the growing of domestic plants. They must be transplanted in an agreeable environment. Unless they bear seed, the roots must be intact. "Imported citronella and geranium," said Dr. True, "have failed to grow in this country owing to the fact that they were injured by faulty packing." Washington and Vermont,

according to the government reports, have been found very suitable for the cultivation of poppy. But labor and freight rates are too high to make the scheme practicable. Licorice, it is said, will flourish in Southern California.

When we consider that something like eighteen million dollars worth of vegetable drugs are imported annually into the United States, we watch with considerable interest the experiments of the Bureau of Plant Industry to preserve our domestic herbs and to cultivate medicinal plants not now indigenous in this country.

* * *

CO-OPERATIVE DRUGGISTS' ADVERTISING.

Coöperative local advertising is being done by druggists in at least four cities—Cincinnati, Cleveland, Chicago, and Philadelphia.

The Cincinnati plan, under which the druggists call themselves the Economy Drug Stores, was described in the BULLETIN some months ago. The Cleveland plan is very similar. There ninety-one druggists are in the scheme, and they call themselves the Mutual Drug Stores. The ads. appear every Wednesday and every Sunday in at least one of the local papers, and the druggists all profit alike from them. An expert ad. writer has been secured to prepare the announcements, and usually, in addition to regular line goods, a special-day offer is made on something as a bait to the purchasing public.

In Chicago and Philadelphia the plan is somewhat different. In Chicago a double page is taken in the *Chicago American* once a week. Across the top and down the center appears text matter giving reasons why the public should patronize the small druggists scattered over the city, whose names presumably appear in the advertisement. The rest of the space is devoted to display ads. inserted by national manufacturers and others of whom the druggists approve, and whose goods they handle. The manufacturers pay enough for the space so that the druggists are put to no expense for the publicity they get. The Philadelphia plan, we understand, is somewhat similar, although we believe only one page is used instead of two.

Another coöperative scheme being worked by the Chicago Retail Druggists' Association has to do with druggists' windows. A company is being formed among the members of the association for the purpose of establishing a definite price for window display space, and

then for renting the space to manufacturers who may want to use it. As first attempted, this plan didn't work out very well, but the problem is now being approached from another direction. Each druggist who goes into the scheme is expected to buy a share of stock worth \$10.00, but it is represented to him that his income will run into a handsome figure annually.

* * *

CANDIDATES FOR WILEY'S PLACE.

The selection of a successor to Dr. Wiley continues to arouse a great deal of comment. The number of candidates is already quite large, but no one seems to know which particular one has the inside track. Drs. Doolittle and Mitchell, both of them already in the Bureau of Chemistry, continue to be mentioned for the place, as does also Dr. H. E. Barnard, Food and Drug Commissioner of Indiana.

The candidacy of Dr. James H. Beal, first suggested by the College of Pharmacy of Columbia University, in New York, has been warmly advocated by numerous friends in the trade, and a considerable campaign in his favor has been developed. The *Midland Druggist* observes that "a more wide-spread movement could not be imagined." We learn from *N. A. R. D. Notes*, too, that Prof. F. J. Wulling has been suggested to the president by some of the pharmacists of Minnesota under the prompting of Charles H. Huhn, chairman of the Executive Committee of the N. A. R. D.

In the meantime President Taft is understood to be waiting until he gets replies to all of the letters of inquiry sent out to scientific men and to college and university presidents throughout the country. He evidently hopes that the consensus of expert opinion will automatically point to some one man for the place, thus insuring the appointment of a popular and effective man.

* * *

PROPOSED MICHIGAN MERGER.

Very wisely, it seems to us, the two State associations in Michigan are planning to consolidate. The Michigan State Pharmaceutical Association has been in existence for twenty-five or thirty years, but the Michigan Retail Druggists' Association was created only three or four years ago. The membership of the latter body was largely confined to the western portion of the State, and the purpose of the organization was chiefly to secure certain legis-

lation. There is no longer any need for a separate society, however, and we are glad to see that a joint meeting will be held in Muskegon during August, and that consolidation will undoubtedly be effected at that time. A referendum vote has been taken among the two memberships, and will doubtless be almost unanimously in favor of the proposed merger. What the name of the greater association will be is one of the details which will doubtless not be settled until the Muskegon meeting. The date is August 13 and 14.

* * *

ADRENALIN PATENTS UPHELD.

The United States Circuit Court of Appeals has affirmed the decision of the lower court upholding the validity of the product patents on Adrenalin and Adrenalin Solution. From this decision there can be no appeal, and the case is therefore settled permanently. The defendants were the H. K. Mulford Company, whose products, Adrin and Adrin Solution, were declared to be clear infringements of the Takamine patents. The decision is so positive in its language that all other imitations of Adrenalin are undoubted infringements also. Some of the manufacturers of these products withdrew them from the market a year ago when the first decision was rendered, and the others will now probably be proceeded against. The Court of Appeals even intimated that a synthetic product would be held to violate the patents, although it refused to discuss this phase of the question for the reason that it was not in issue in the Mulford suit. Adrenalin and Adrenalin Solution are manufactured by Parke, Davis & Co., who pay royalties to Dr. Takamine, the inventor.

* * *

PREREQUISITE IN NEW JERSEY.

For several years there has been a movement in New Jersey looking toward the enactment of a graduation prerequisite law. Last summer, at the annual meeting of the State Association, the subject was threshed out with a good deal of heat, and the final result was the adoption of a resolution by a small majority favoring the enactment of such a law. A bill was subsequently drawn up and introduced this last winter into the State legislature. Some factional differences developed, we understand, particularly between two rival insti-

tutions in the State, and so unfavorable an impression was made upon the Legislative Committee before which hearings were held that the whole proposition was tabled. It will doubtless come up again at this year's meeting of the association, and in all probability another bill will be introduced in the legislature, for the majority of sentiment in the State seems to favor the prerequisite proposition.

* * *

DR. TAKAMINE HONORED.

Dr. Jokichi Takamine has recently been granted a distinguished honor by the Imperial Academy of Japan. A monetary prize and award of high merit have been given him for the discovery of Adrenalin, and the presentation is to be made in Tokio on the 12th of the present month. Although the Imperial Academy has been in existence for about seven years, Dr. Takamine is only the second man to be so honored. The first prize-winner was Dr. Kamara, the famous Japanese astronomer. The Imperial Academy was organized by the Japanese government, and the membership is limited to 60, one representative man being selected by the Emperor from each department of scientific endeavor. The Academy corresponds to the Académie Française or the Royal Society of Great Britain, and its awards are considered evidence of very great distinction.

* * *

THE DETROIT DRUG CLUB.

Some months ago we spoke about the drug clubs which were being formed in St. Paul and Minneapolis. A similar organization has now been effected in this city. A campaign for increased membership is on, and the purpose is to have club rooms if the receipts will warrant them. In the meantime the purpose of the club, following the plan in St. Paul and Minneapolis, will be largely if not entirely social. The officers of the organization are Henry C. Reinhold, president, Robert W. Rennie, vice-president, Oscar W. Gorenflo, secretary, and P. E. Biddecombe, treasurer.

* * *

The druggists of Greater New York have decided to accept the sliding scale of telephone commissions agreed upon between the telephone company and the special telephone committee of the Pharmaceutical Conference.

EDITORIAL

THE VARIATION CLAUSE IN THE FOOD AND DRUG LAWS.

Every once in a while we hear a protest against the so-called variation clause in the Federal food and drugs act—a clause which is likewise embodied in most of the State laws. This clause may be found in italics in the following quotation from Section 7 of the Federal act:

That for the purposes of this act an article shall be deemed adulterated: In the case of drugs, first, if when a drug is sold under or by a name recognized in the United States Pharmacopœia or National Formulary, it differs from the standard of strength, quality, or purity, as determined by the test laid down in the United States Pharmacopœia or National Formulary official at the time of investigation: *Provided, That no drug defined in the United States Pharmacopœia or National Formulary shall be deemed adulterated under this provision if the standard of strength, quality, or purity be plainly stated upon the bottle, box, or other container thereof, although the standard may differ from that determined by the test laid down in the United States Pharmacopœia or National Formulary.*

Recently, for instance, a leading article was published in *N. A. R. D. Notes* in which, among other statements, the following opinion was expressed:

To every retail pharmacist who has given this section serious thought, it is a mystery as to who is responsible for the words following the word "Provided" in the section. To them it seems a travesty on justice; and to every intelligent person the section means that "no matter what the composition of a preparation may be, if the label gives it an official name and its strength is stated, it is not adulterated."

All such criticisms as this betray an utter inability to grasp the fundamental purpose of food and drug laws. Their object is not to prevent the sale of this or that food or drug, but to compel its sale openly, fairly, without false pretense, and with the positive truth about it stated honestly on the label. If a man wants to buy oleomargarine instead of butter, he should have the right of all free citizens to do it, but he mustn't be deceived and given oleomargarine when he asks for butter and pays butter prices. That's all there is to it. Give the man what he wants—but don't deceive him. Tell him the facts—and then it's up to him.

There happens to be a stomach specialist in Detroit who prescribes large quantities of a weak tincture of nux vomica only 25 per cent of the official strength. He does this because he wants his patients to take teaspoonful doses, which are easily measured by them. Now does anybody mean to say that it should be illegal to furnish this physician with tincture of nux vomica of this character so long as the strength is plainly printed on the label? He isn't deceived, is he? He wants this particular product and he insists on having it.

There is only one "Pill Opium" in the U. S. P. It contains one grain of opium. Suppose physicians want pills containing one-half grain of the drug? Should the law declare that they cannot buy such pills, even though the strength is clearly printed on the bottle?

But so far as drugs are concerned, these considerations are after all beside the question. The main reason why the variation clause should always stand is this: It will permit of pharmaceutical progress. The U. S. P. is brought out only once in ten years. Must no improvements be registered in medicinal products until ten years from now, say, when a new book happens to be published? Everybody knows that the scientific investigators in the large manufacturing establishments have chiefly been the men who have brought about a steady advance in standards, and that the Pharmacopœia has been three or five or ten years behind them in making such changes official. Shall we deny ourselves as a calling the benefit of this forward movement, and kill or stultify all progress? Must we hold improvements back until the clock rings a few years hence?

This is exactly what will happen if we declare by law that no changes may be made in U. S. P. or N. F. preparations. Why resort to such an obstinate measure? Every protection is afforded if, making the necessary change in a given preparation, the facts are clearly stated on the label as the variation clause provides.

Furthermore, there are good lawyers who maintain that the variation clause is the only thing which saves Section 7 of the food and drugs act. Otherwise there is a strong probability that when put to the test of court construction the section would be held unconstitutional. The right of the individual to buy what he wants, and the right of the manufacturer and dealer to make and sell honest

goods with honest labels, cannot be infringed upon beyond a certain more or less clear and definite point. This is a free country.

SOME HYNSONIAN VIEWS.

Henry P. Hynson, our irrepressible friend from Baltimore, has been telling the physicians of his own city what ought to be done in the future to put the relations of pharmacist and physician on a firm and permanent footing. He doesn't believe much in the present U. S. P. and N. F. propaganda movement. "There is a pitiable lack of knowledge and understanding evidenced in most of the propagandic exploitation," and anyway he thinks it unfortunate "to teach that all that is in the Pharmacopœia or National Formulary is good, and all that is without is bad." This is to "put lions in the pathway of progress."

What, then, are Mr. Hynson's ideas about what shall be done to bring about "a more beautiful and happy to-morrow?" Well, in the first place, we must rationalize the standard books used alike by the two professions, and clear away a lot of rubbish. He would leave the Pharmacopœia, however, as it is—a book of standards for all medicines used by the physicians of America. Mr. Hynson is not an advocate of a narrow Pharmacopœia.

1. What some of the medical extremists want, however, when they talk about a narrow Pharmacopœia, is what Mr. Hynson would have in the form of "a national compilation of standard therapeutic agents." To this seventh heaven he would elect only those medicaments which "bear the stamp of scientific approval and the impress of some competent and general authority." He would let this authority be the A. M. A., and let that association publish the book.

2. In addition to this, we must have something like the N. F. for the publication of formulas acceptable alike to higher medicine and higher pharmacy. The present book, however, contains in Mr. Hynson's judgment a lot of mixtures which have no good reason for existence, and he would throw them overboard and have a purified and scourged National Formulary. This, unlike the book of standard therapeutic agents, would be published by the American Pharmaceutical Association.

3. In casting these devils out of their present

heaven, however, they should be caught and collected in a new book of miscellaneous odds and ends of formulas, for many foolish people still insist on using such things. For this purpose Mr. Hynson would have an "unendorsed collection"—a "final resting place" for things removed from the accredited authorities. Such a book of "unofficial formulas" the A. Ph. A. now has in contemplation.

To Mr. Hynson's way of thinking these several things would purify the atmosphere. The Pharmacopœia need then no longer be used as the basis of any propaganda movement, for there would be a book of accepted therapeutic agents, compiled by the physicians themselves, which would really stand the test of therapeutic worth. The same thing would be true of the purged National Formulary, which would no longer contain things of questionable merit. The A. M. A. book of standard agents, and the A. Ph. A. book of standard formulas, could be used as a platform on which both professions could work together harmoniously. The Pharmacopœia would be relegated to its proper position as a book of legal standards of identity and strength, while all of the doubtful mixtures now cursing the N. F. would be cast apart into a book which nobody need put any faith in but which everybody would use.

So there you are—a programme of reform worked out by one of the leading ethical pharmacists of the country.

THIS ISSUE OF THE BULLETIN.

Our friends have been telling us in gratifying number that we have been turning out a great journal this spring. Elsewhere we are printing a very few of these generous letters. Such praise has spurred us on to renewed efforts, and we are presenting some special features in this issue of the BULLETIN which we hope will prove interesting and attractive:

1. Our Illustrated Section of six pages is unusually good this month. We are devoting two pages to pictures of the president of the N. A. R. D., his store, and his residence. Then there is a page of nine portraits showing presidents of some of the State pharmaceutical associations, and another page of well-known teachers in our schools and colleges. The cartoon of Prof. John Uri Lloyd

will, we hope, strike everybody as being excellent, while the full-page picture of B. S. Cooban, taken behind his own counter for us specially, will prove of particular interest to BULLETIN readers because of Mr. Cooban's former connection with this journal.

2. We have recently brought to a close our prize contest for best papers on "The Sale and Fitting of Trusses." The three prize-winning contributions are printed in this issue, and they will certainly prove a novelty. Very little has appeared in the drug journals on this subject, and we fear that most druggists have neglected their truss business, but our three contributors tell how they have made a substantial success of the line.

3. The second article in the series of technical papers on sundries is devoted to tooth-brushes. Mr. J. Addison Bowne, an importer of large experience, describes how the brushes are made, what they are made of, and gives many pointers of usefulness to the druggist who desires to know all he can about the goods which it is his business to sell over the counter.

4. Our series of prize-winning papers on "My Best Paying Side-line" is also continued. Mr. Holzhauer tells how he has built up a profitable business on razors and razor supplies, and he sends in a photograph showing how he features these goods in his window.

In the foregoing paragraphs we have merely touched on some of the special features of the present issue of the BULLETIN. Next month we shall have a lot of especially good things. First in importance, perhaps, we shall print the three hair- tonic formulas which have been awarded prizes in our recent contest, and shall probably give space also to a couple of short papers in which druggists tell how they have pushed these preparations. Then we shall continue the series of articles on druggists' sundries, the series on "Best Paying Side-lines," the business autobiography of Mr. Farrington, and other things which have proved of interest and helpfulness to our readers. Nor should we neglect to mention that we shall have in the next BULLETIN six or seven pages of pictures which we hope will prove more attractive than ever.

The fact of it is, we are not satisfied merely to have a paid circulation for our journal

which is three or four thousand in excess of that enjoyed by any other drug paper, but we want to forge ahead farther yet. Ours is a six-cylinder, high-power proposition—and we want to keep the dust all behind us!

WHAT THEY THOUGHT OF THE LAST BULLETIN.

We are always being made happy by a constant stream of letters from our readers telling us how much they appreciate this journal. After the April number had been published, however, congratulations were more numerous than ever. Witness a few of them:

I have just read the April BULLETIN, and I must say that the journal gets better all the time. Have been a subscriber four years, and the last issue is the best I have seen. The pictures are appreciated by all, and the more the better. There has never been a dull copy since I began taking the journal. One kick I have coming is that I am sorry to see the department of "General Essays" drop out. JEWELL A. STILL.

Arkansas City, Ark.

Your April issue of the BULLETIN is without doubt the best you have ever published. The journal is always good, but this one excels them all. It contains many, many of the most helpful suggestions for live druggists, and is one which would be valuable if kept for reference. FINIS J. ROGERS.

Chattanooga, Tenn.

Permit me to congratulate you upon the appearance of your April issue, both editorially and mechanically. With best wishes for the future of the BULLETIN OF PHARMACY, which we assure you is always carefully read by us, we remain, T. P. COOK,

Mgr. New York Quinine and Chemical Works.
New York City.

We tried pretty hard to make the last issue of the BULLETIN a winner, and we are glad to know that our efforts were appreciated.

MYLERT VERSUS ALERT.

The time will come when no pharmacist will think of trying to do business without belonging to his local organization any more than he now tries to get along without a bank account and credit with manufacturers and jobbers.—*Meyer Bros. Druggist.*

This is a fine article, Bro. Whelpley, except the "credit with manufacturers and jobbers." Our doctrine is for retailers to *pay cash and take the discount*, or strive valiantly for the time when they can do so if they can't now.—*C. R. D. A. News.*

Chas. Mylert was not Alert this time. It is exactly by "paying cash and taking the discount" that a merchant establishes credit with manufacturers and jobbers.

THE HALL OF FAME

PROFESSOR BRADLEY GOES TO BOSTON.

Theodore J. Bradley, B.S., Ph.G., has been elected to succeed the late J. W. Baird as executive officer and Professor of Analytical and Organic Chemistry in the Massachusetts



THEODORE J. BRADLEY.

College of Pharmacy. The choice is an excellent one. Professor Bradley is not particularly well known in pharmaceutical circles, for the reason that during the last few years he has specialized more in chemistry, but he has an equipment of native ability and wide training which fits him admirably for the place.

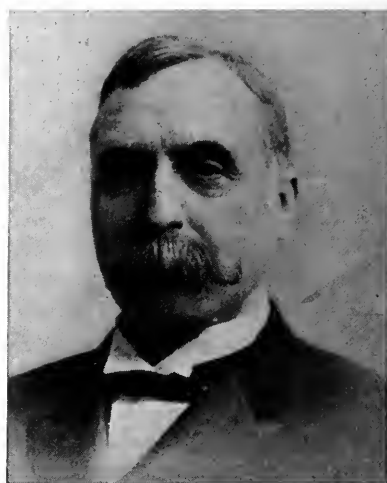
Some of the things that may be said of him are that he spent five years' apprenticeship in two of the best drug stores in Albany, N. Y.; was graduated from the Albany College of Pharmacy in 1895 at the head of his class; completed a four years' course in engineering and science in the Rensselaer Polytechnic Institute, Troy, in 1904; has for seventeen years been at various times instructor, lecturer and adjunct professor of chemistry and pharmacy in Albany College of Pharmacy, during the last twelve of which he has been the secretary of the faculty and the executive and financial officer; has been an instructor and lecturer in chemistry at the Albany Medical College; chemist in the lab-

oratories of the New York State Department of Health and the New York State Department of Agriculture, and an expert examiner in pharmacy for the New York State Civil Service Commission. In addition to all this Professor Bradley has for twelve years been teacher of science and mathematics in the Albany Academy, a famous boys' military and preparatory school, and during the last eight years has been head of the department in these branches.

So far as his native qualities are concerned, he is brainy, determined, a hard worker, full of steam and energy, and a man pretty sure to push along in anything that he undertakes. The Massachusetts College, with its rich endowment, has an opportunity to work out a future for itself of great value to the calling, and Professor Bradley is an excellent acquisition toward the accomplishment of this end.

IS IT TO BE "CONGRESSMAN STODDART?"

Thomas Stoddart, drug leader in New York State, is a candidate for the Republican congressional nomination in the new Buffalo district. No one who knows Mr. Stoddart doubts that in point of business experience, contact with legislative matters, and sobriety of judgment he would make an excellent congressman. For years he has been one of the chief men



THOMAS STODDART.

among the druggists of New York State. He served twice as president of the New York State Pharmaceutical Association some years ago, and after a long hiatus he was called back into the same service a year or two since. No

bill of importance affecting pharmacists has been introduced in the New York legislature but that Mr. Stoddart has had much to do with its original construction and subsequently with its legislative history in Albany. Always prominent in the civic affairs of Buffalo, he has once or more been a member of the City Council, and during at least one session he was the presiding officer of that body. On more than one occasion he has been prominently mentioned for the mayoralty, and it does not beggar the truth to say that he has played a most conspicuous rôle in the political and commercial life of the city.

TOASTING PROFESSOR REMINGTON.

Prof. Joseph P. Remington, maker of pharmacopœias, was given a testimonial dinner the other day by the Philadelphia Drug Club. It was in honor of his sixty-fifth birthday on the one hand, and, on the other, of his fortieth anniversary as a member of the faculty of the Philadelphia College of Pharmacy. The tribute was well deserved. No one in the country is more worthy of the praise and blessings of his



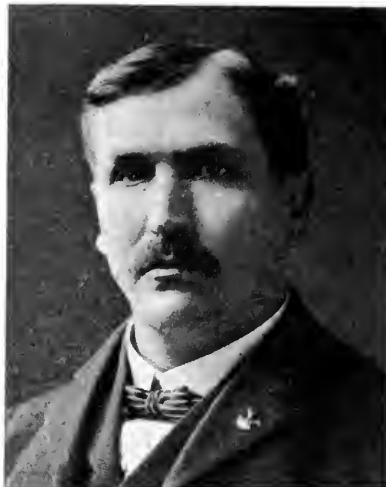
JOS. P. REMINGTON.

fellow workers. Professor Remington is not only the dean of the Philadelphia College, but he comes pretty near being the dean of American pharmacy as well. The dinner was largely attended, and there were many telegrams and letters read from the Professor's numerous friends throughout the country. These messages have since then been brought together in the form of a neat souvenir, and they give

gratifying evidence of the esteem in which the man is held. As Dr. Beal said, "long may he flourish!"

A DRUGGIST FOR DAIRY AND FOOD COMMISSIONER.

Down in Ohio—that grand old State which has produced so many presidents and would-be presidents—the Dairy and Food Commissioner



CHARLES S. ASHBROOK.

is elected by the people instead of appointed by the governor. The nomination and election of State officers is in full swing this year, and it affords us much pleasure to see that Charles S. Ashbrook has been strongly urged to become a candidate for the Republican nomination for Dairy and Food Commissioner. It will be recalled that Mr. Ashbrook served two terms recently as president of the Ohio Pharmaceutical Association, and it is considerable praise to say of him that he was the only man ever elected to this position twice. So creditable, however, was his energetic campaign looking toward the organization of county associations, and so efficient was his administration generally, that the members insisted on putting him back into office in order that he could carry forward some of his reforms.

He has a prosperous store in Mansfield, and of that town he is a leading citizen. For two years he was president of the Mansfield Mercantile Association, and he will make an excellent Dairy and Food Commissioner if the people of the State choose to nominate and elect him.



*Sincerely,
H. C. Shuptrine
1/9/22*

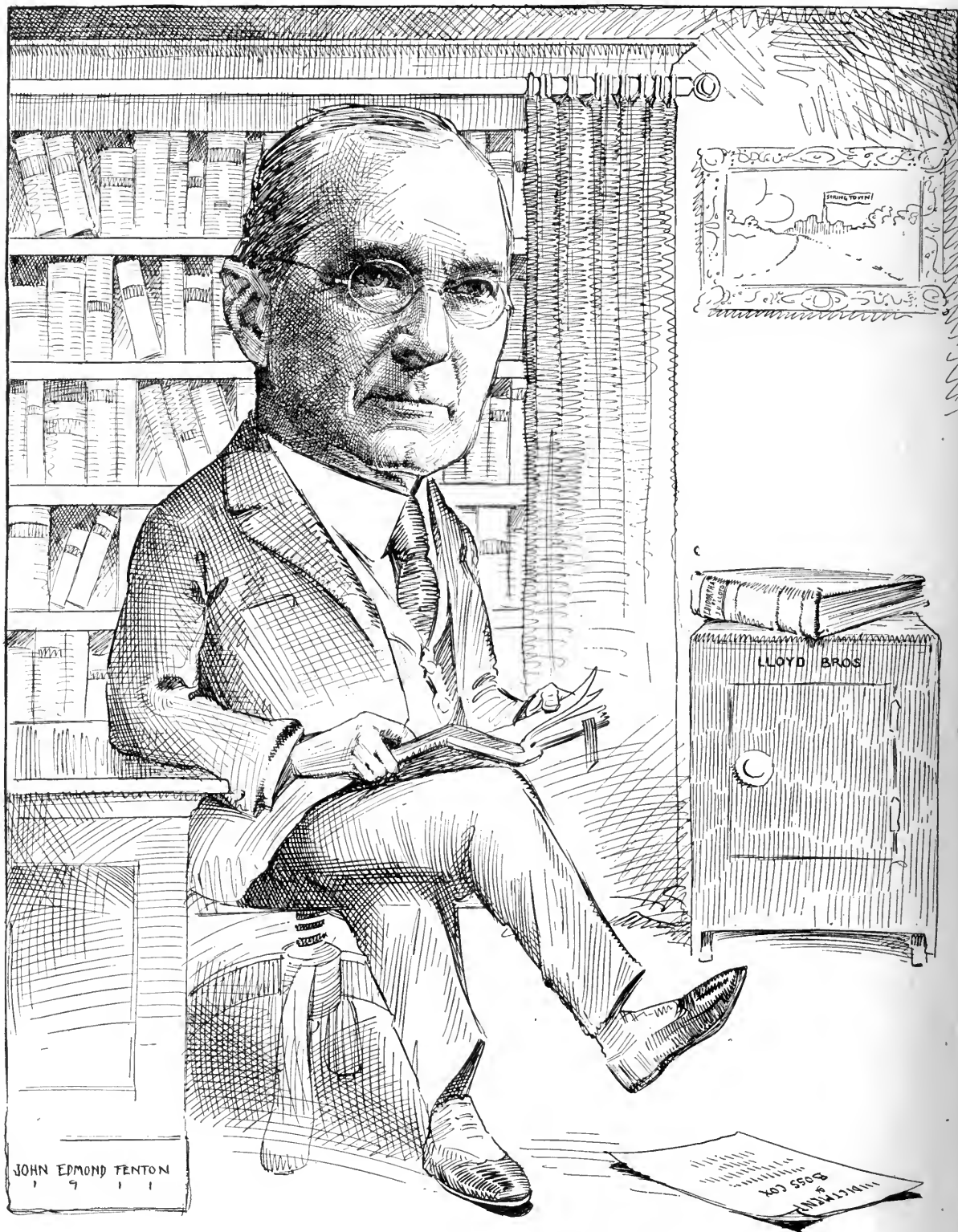
Herman C. Shuptrine, Savannah, Ga., President of the National Association of Retail Druggists.



Mr. Shuptrine's house.

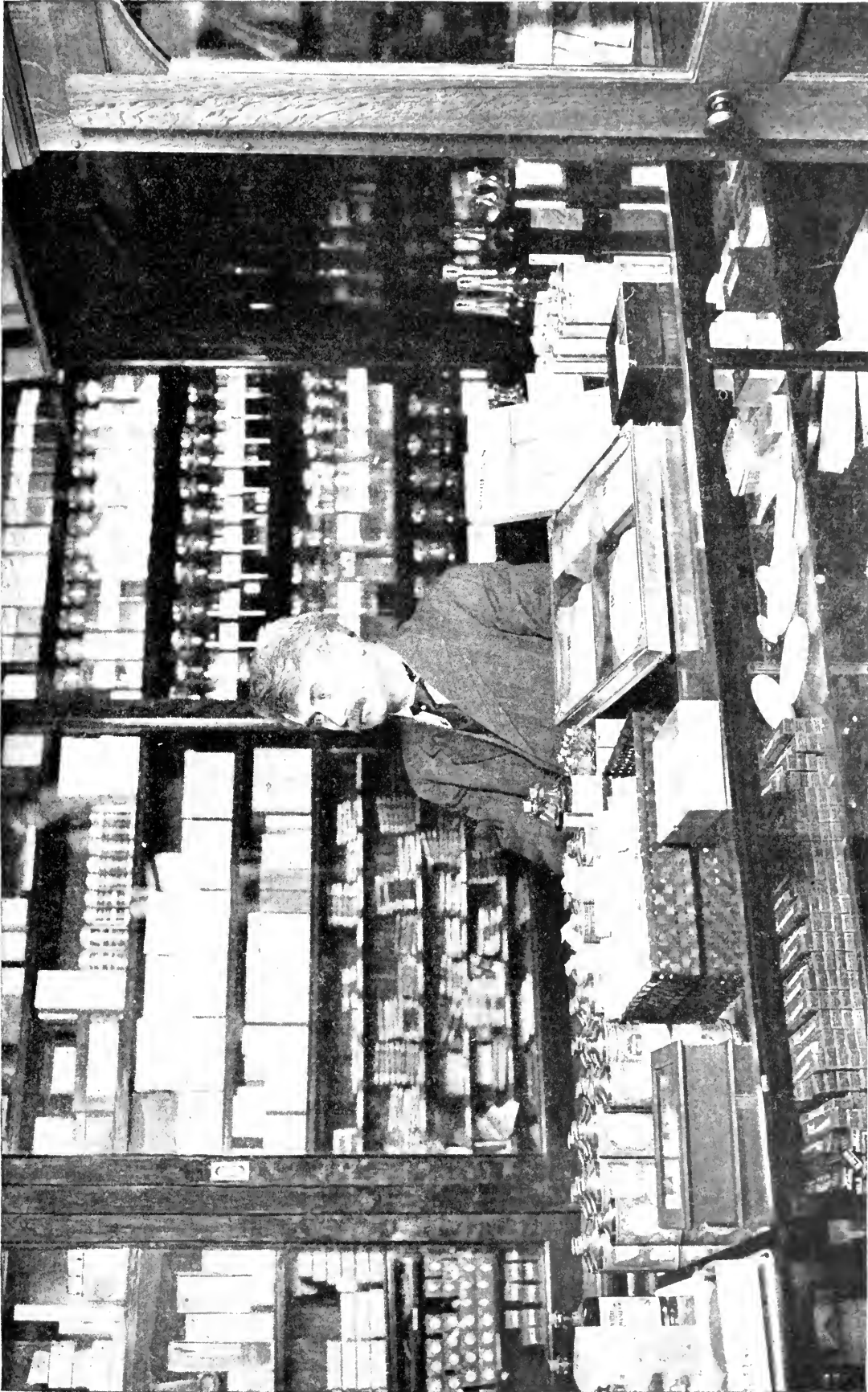


Mr. Shuptrine's store in Savannah.



John Uri Lloyd—The Man of Many Talents.

Pharmacist, Chemist, Investigator, Teacher, Historian, Thinker, Library-builder, Civio-reformer, and Writer—author of the "Stringtown" tales, "Etidorhpa," and novels, scientific papers, dispensatories, and historical bulletins without number.



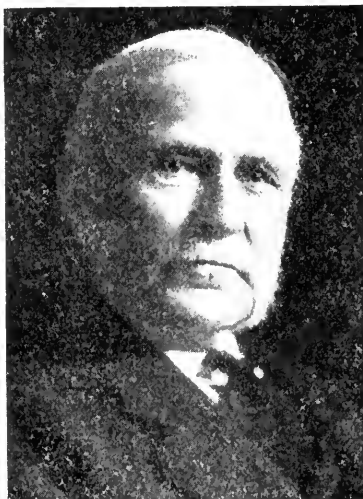
Druggists Photographed in Their Stores.

2. B. S. Cooban, Chicago, Illinois.

[Picture made especially for the BULLETIN OF PHARMACY.]



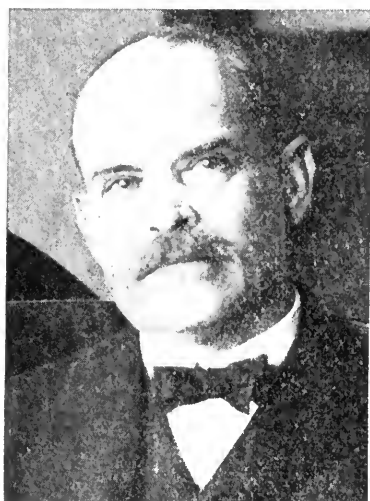
C. Lewis Diehl, Professor of Theory and Practice of Pharmacy in the Louisville College of Pharmacy.



Alfred B. Huested, Professor of Materia Medica in the Albany College of Pharmacy.



Charles H. LaWall, Associate Professor of Pharmacy in the Philadelphia College of Pharmacy.



George B. Kauffman, Professor of Pharmacy in, and Dean of, the College of Pharmacy of Ohio State University, Columbus.



E. H. LaPierre, Professor of Pharmacy in the Massachusetts College of Pharmacy, Boston.



Charles F. Heebner, Dean and Professor of Pharmacy, Ontario College of Pharmacy, Toronto.



Herman J. Lohmann, Dean of the Department of Pharmacy of the University of the State of New Jersey, Jersey City.



Clair A. Dye, Associate Professor of Pharmacy, College of Pharmacy of Ohio State University, Columbus.



E. V. Howell, Dean and Professor of Pharmacy, Department of Pharmacy, University of North Carolina, Chapel Hill.

Teachers in Some of the Pharmacy Schools and Colleges.



Charles B. Sears, Auburn, N. Y., president New York State Pharmaceutical Association.



William E. Warn, Keyport, N. J., president New Jersey Pharmaceutical Association.



A. V. Pease, Fairbury, Neb., president Nebraska State Pharmaceutical Association.



Joseph L. Lemberger, Lebanon, Pa., president Pennsylvania Pharmaceutical Association.



J. F. Wagner, Garden City, S. D., president South Dakota Pharmaceutical Association.



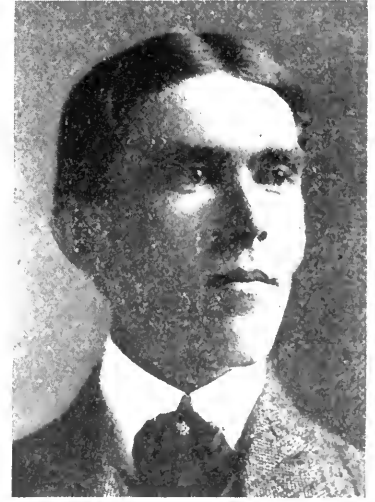
Jacob Schrodtt, Dallas, Texas, president Texas State Pharmaceutical Association.



T. C. Bayse, Rockport, Ind., president Indiana Pharmaceutical Association.



Harry Dick, Lawrence, Kansas, president Kansas Pharmaceutical Association.



C. L. Jackson, Newton, Miss., president Mississippi Pharmaceutical Association.

Presidents of Some of the State Pharmaceutical Associations.

Three Prize Papers on the Sale and Fitting of Trusses.

Those druggists who have really made a study of the fitting of trusses, and have devoted themselves to pushing the line, have found it to be one of the most profitable departments in their stores. Failure usually results from indifference and neglect. In order to show how success can be realized we recently offered two prizes for the best papers by experienced druggists—papers in which they should tell what methods they had used in building up a custom in the sale and fitting of trusses. The prize committee thought a third paper among the entries was worthy of an award, and so we are now printing in this issue of the BULLETIN all three contributions. They will be found full of suggestion and profit.—THE EDITORS.

THE FIRST PRIZE PAPER ON TRUSSES.

BY R. J. PERRY,
Parker's Prairie, Minnesota.

Yes, I sell trusses. I fit them also. The selling and fitting of trusses are two different propositions. One is merely a commercial transaction; the other requires knowledge and skill and involves a responsibility. My first

rebuild whole trusses from parts of broken ones. It was a tedious and dirty job, but when it was completed, I knew more about the making of a truss than any one in the store. The task I then grumbled at has proved of much value since.

Years later, in my own store, I decided to put in a line of trusses, as I believed there was money in it. A Dr. Johnson, an itinerant "rupture specialist," visited our burg once a month and raked in the coin by fitting trusses, for which he charged big prices. Once he announced his final visit; I called upon him and asked him if he really meant it or whether it was an "Adelina Patti farewell." He said he meant it and suggested that I take over his local patronage. Said he:

A PROFITABLE LINE.

"It's easy work if you once learn how and there's good money in it. Pick out a good dependable style of truss and learn what *it* will do and what *you* can do with *it*. I don't pretend to doctor anything but ruptures and only to fit trusses to them. I'm not a graduated doctor, but as I was in the business before medical laws were passed I have an exemption certificate under which I can work. Unless you are a licensed doctor, or can arrange matters with your home doctors, you cannot charge for fitting trusses. Better look the law up and make sure of your position first."



R. J. Perry.

acquaintance with the truss business came some forty years ago, when, as a boy working in a city drug store, I was called upon to clean up and sort out a job lot of trusses which had accumulated in an old closet. I had to tighten screws, adjust pads, repair leather covers, and

I looked up the law and found that only licensed M. D.'s could fit "appliances," but my lawyer told me that so long as I made no charge for my services, I could not be interfered with. However, the local physicians were interviewed and not one objected to my proposition; in fact all encouraged me to stock up and some offered to refer patients to me if I proved successful as a fitter. One of them frankly admitted that he did not know how to fit a truss and apparently could not master the knack as he had no mechanical faculty in his cerebral make-up.

From a friend, who had for several years been one of the surgeons of the Schnedicker and Miller Rupture Treatment Companies, came the suggestion that the most satisfactory truss was the kind known as the "silver bronze Sherman style," at that time put upon the market by the Penfield Co. He further advised me to thoroughly study the anatomy of ruptures, their symptoms and diagnosis, the mechanism of their reduction, and especially their retention by trusses.

Well, I waded into the subject; borrowed Gray's Anatomy and half a dozen books on surgery, and after a month of study was ready to stand an examination. Sherman's truss I found was sold wholesale at \$24.00 a dozen; when fitted to the patient and sold with a guaranty to retain the rupture and one year's repairs free, the price was \$15.00 per each—not a bad profit. This was the regular price all over the country and I could see no reason for cutting prices. I got that price twenty-five years ago; I get it to-day.

STOCKING UP.

When ready to stock up I left the store in charge of my clerk and spent a week with my friend the rupture specialist, and from him got much practical "laboratory" work in fitting trusses to actual patients, running from five to ten cases daily. On my return home I purchased small sample lots of several different styles and stocked up pretty heavily on the Sherman style. Upon their arrival an announcement of my new department was made in the local papers. I advertised to supply any truss made at the regular price, but featured the Sherman truss, *under my own trade mark*, and stated that when fitted to the patient by *me personally* I would guarantee it to hold the rupture at all times and under all conditions

and to keep it in repair free for one year. The first month I fitted enough trusses to pay for my entire stock!

FITTING A TRUSS.

To fit a truss. First determine the kind of rupture your customer is suffering from. Secure a perfect reduction of the hernia and make sure that the canal is empty of intestine, omentum, or other abnormal contents. Unless the canal can be perfectly emptied do not fit a truss; send the customer to a competent physician for proper treatment, as a truss applied under such conditions will surely make trouble for both you and your customer. With the patient lying down, apply the truss just as it comes from the factory, and then while it is on the body adjust the pads to cover the inner ring and upper part of the canal; with your hands bend the wire spring so it will hold the pads over the right spot, then fasten the pads in place so that their surface presents the pressure in a direction upwards, inwards and backwards, or at right angles to the plane of the canal at the inner ring. Fasten the back strap and then test the retention action of the truss.

Have your customer, while still lying on the table, give several sharp, spasmodic coughs. If the intestine enters the canal your adjustment is faulty and must be done over until this coughing test is met with. Now let the customer stand on his feet and pass the coughing test. Then bend forward, to the right, left and backwards, then squat, step up on a chair and *jump* down. If all of these tests are met satisfactorily tell him to go about his usual work and carefully watch the action of the truss. After it has been worn a little while the body heat will relax the spring somewhat and it may need readjustment. Warn the customer not to "monkey" with the truss, but to come to you if anything goes wrong with it.

Some of my experiences may be interesting. Errors of diagnosis were frequently found. People came to me for trusses who were suffering from hydrocele, hematocele, orchitis, tubercular testicle, hernia testis, cryptorchidism, varicocele, etc. Many of these were already wearing trusses which had been fitted (!) by other people, but which failed to "hold the rupture." Such cases were referred to their family doctor or to some competent surgeon for treatment.

Many people came asking me to adjust trusses which they had purchased elsewhere and which failed to retain the rupture. Many of these had been "fitted" over the outer clothing; most of them were cheaply made and worthless as retention appliances. These I positively refused to adjust, telling the people I would not fit any truss but my own special style. The demerits of the "cheap" trusses were explained to them, and not infrequently they discarded their old trusses and took one of mine. In time it became generally understood that while I sold many kinds of trusses I would not fit or guarantee any but my own.

I was advised and have always found it the best practice to fit every case with a double truss. In single ruptures a blank pad, a large flat one, is placed over the normal side as a prophylactic measure. The pressure of a truss tends to throw the weight of the intestines towards the sound side, and as this is presumably no stronger than was the ruptured side originally, there is an increased probability of another rupture unless a protective blank pad be used. In double ruptures of course a double truss is necessary to retain both ruptures properly.

The matter of pads is an important one. These are of many shapes, sizes and materials, and it took considerable experience to learn to fit the right pad to a rupture. The pad must cover the opening of the inner ring and the upper part of the canal, be large enough to do this and of such a shape as to preclude the intestine coming out and slipping around. There are hard rubber, wood, celluloid, metal, *papier mache*, enameled wood, sponge-rubber and water pads; solid and spring pads; round, oval, ovoid, triangular, conical, spheroid, flat and three-finger-shaped pads. You can see the immense field of possibilities in pads.

THE CHOICE OF PADS.

For years I used chiefly the ovoid hard rubber pad. Lately I have used the ovoid sponge-rubber pad. The plain wood pad absorbed perspiration and dermal oil and became foul; the celluloid pad did not stand the wear and tear well; metal pads became corroded and made the skin sore; *papier mache* pads presented the same troubles as the wooden ones; enameled wood pads lost their enamel and became too rough; water pads leaked, flattened out and became useless. The ovoid shape was

best suited to most cases; the other to atypical ones. Spring pads were preferred because they were self-adjusting to the various body movements.

I refused absolutely to recommend rubber or celluloid covered trusses because of the extreme difficulty in securing proper adjustment and the danger of damaging the covering material. Many wearers would try to adjust them according to directions and almost invariably cracked or burned the rubber or celluloid.

Quite a little revenue came in from repairs, such as replacing lost or worn screws, broken pads, furnishing new covers, etc. I soon learned that a broken spring could not be repaired satisfactorily as the soldering did not restore the strength of the spring and interfered with its "spring action." Repairs should be priced in accordance with the original price to the customer of the truss repaired or the truss from which the repair parts are taken. A pad for a ten-dollar truss should be priced just the same when placed on a two-dollar truss as when placed on one of its own style. The price of the component parts of a truss must bear a definite ratio to that of the whole. A small stock of pads, covers, springs and repair parts should be kept on hand.

I read and studied the literature of every advertising truss and rupture specialist. Having acquired a local reputation as a truss fitter, many people came to me for my opinion concerning these advertisers, and I have never hesitated in telling the truth—that most of them are frauds. I would advise any druggist taking up this line of work to investigate along the same lines, expose the humbugs, and boost his own truss.

A SPECIAL ROOM ADVISABLE.

If you undertake to fit trusses you will need a private room which can of course be used for other purposes. In this room you will need an examining table, with cushioned top, two or three chairs, a warm rug on the floor, stove or other heating arrangement, and your work bench for repairs, assembling, etc. Keep your stock of trusses in heavy paper-board boxes, protected from light and weather, dust and insects.

You can fit ladies if they see fit to come to you, but it is a good idea to have another lady present whilst the fitting is going on. The prices of trusses for women and children are

the same as for men; the first cost of the truss is the same, and usually there is more trouble and bother in fitting them.

Having taken up this line of work let people

know about it. Advertise the fact to the public in the newspapers and by special circulars directly to those whom you know to be in need of your help.

THE SECOND PRIZE PAPER ON TRUSSES.

BY JACOB SCHRODT, Ph.G.,
Dallas, Texas.

Possibly seven out of ten men should wear a truss or submit to an operation. Notwithstanding that fact, for many years I went along believing that a truss was one of those unprofitable articles which a druggist was obliged to carry in stock and sell in a perfunctory way like many other articles of merchandise.

THE START.

But one day I awoke to the fact that the majority of the human race needed a device to reduce the danger that comes from strangulated hernia and to make life more comfortable. For several months I made a study of fitting trusses and decided it was worth the time in a financial and educational way to push the sale of trusses.

I fitted up a special room for the purpose. The expense of furnishing such a room need not be great. And one is well repaid in prestige which comes to a druggist who has the proper facilities for fitting trusses. A person suffering from hernia naturally is skeptical. This is possibly due to his having purchased some appliance that would not hold well. He may have bought a truss from some one that knew very little about fitting, and the result is a discouraged and dissatisfied customer.

We wish to begin right. The first impression that a customer receives is usually a lasting one; so I always try to impress customers with my ability to properly fit them. Once you get their confidence, it is very easy to make a sale, especially if you do your part, or rather understand your business. You must understand the mechanical construction of the particular appliance you sell and fit. Then it is easy to make the sale and very few failures will result. I have learned that to get the best results from wearing a truss it is necessary to insure the proper fit. One must take accurate measure and adjust the shape of the truss so that it will conform to the body. For there are no two persons whose hips are shaped alike, and each person must be fitted

accordingly. I sell and fit only one make of truss.* It is easier to give satisfaction by that practice than by selling several makes. It also helps me to convince the customer that I believe in what I sell, and avoids confusion in his mind as to the one to buy.

GUARANTEEING EACH TRUSS.

An absolute guarantee is given with each sale we make, that the truss will hold the hernia. If it does not, the person wearing it may bring it back any time before the expiration of thirty days. This we believe is the strongest guarantee given by any one, and is just a little more than any I ever heard of, but has proved quite the proper thing. We do not expect to please and fit every customer we have. It is impossible to do this, but one can fit the majority of people.

If upon examination you find adhesions, and that the hernia has not been reduced for some time, do not attempt to fit that man with a truss. Rather advise him to consult some surgeon, and both you and he will be better satisfied.

The truss I fit is so constructed as to hold at the internal ring. This is the proper place at which to support a rupture, and not at the external ring, as the latter would allow the internal ring to be open, and the pressure would be on the gut. Thus you would never get a cure, much less make a sale.

In spite of the fact that one of the best authorities, a great many years ago, advised that a pad should be placed over the internal ring, the idea has not been given much thought apparently by the majority of manufacturers.

For the amount of money invested, and the amount of free advertising we get, the proper fitting of trusses pays well. Aside from the trusses sold, it brings business on other articles, for it attracts people to the store who could be induced to come in no other way.

*This truss is "The Smithsonian," and is made by the Smithsonian Truss Co. of Topeka, Kansas.—J. S.

THE THIRD PRIZE PAPER ON TRUSSES.

BY M. L. McCULLOUGH,
Oxford, Pa.

My brother and I are in the drug business in this town of twenty-five hundred people. We have a good trade, carrying but two side-lines: cigars and trusses.

Does it pay a druggist to carry a stock of trusses? Certainly! At least, we have found it, or rather made it, a very satisfactory and profitable part of our business. How have we done it? Well, I will try to tell you, briefly.

THE STOCK.

First, as to stock. Several years ago we carried several kinds of trusses. Now we have *only* the hard rubber, because we have found it the most satisfactory in every respect, especially in one particular, which I shall speak of later.* We carry only a few trusses of each size, ranging from 26 to 38 inches. Children's and double trusses we do not keep in stock, finding it more satisfactory to make the necessary measurements and order directly from the manufacturer. We are so situated that we can get them in a few hours.

WHERE THE BUSINESS COMES FROM.

Having the stock, how did we get the trade? Partly, of course, by advertising, the local newspaper proving to be our best medium. When we consider that one in every fifteen persons in the civilized world, at some time in life, is affected with hernia, that the majority of these people are compelled to wear trusses constantly, that the average life of a good truss is seven years, and that the affection is common to people of all localities at all seasons, we know that a large and stable business is being done by somebody, somewhere. Why should I, why should you, brother druggist, not have a share of this business? We should and we can; but we must go after it. It is always about us. Often persons are passing our doors on a costly trip to the distant specialist to be fitted for a simple form of hernia which you or I, their local druggist, could do just as satisfactorily and at much less cost to them. Yes! Let the people know that you are in the business and you will get some inquirers.

Then having stock and customers, is this all? Oh no! This is only the beginning of either success or failure according as you, Mr. Druggist, prove equal or otherwise to the occasion. No one need hope to make a success of fitting trusses until he first has a fairly accurate knowledge of the *cause, nature, forms, and possible results* of hernia. This can be acquired by carefully studying some good authority on the subject.

Having the theory, add to it five other es-



M. L. McCullough.

sentials, viz., *common sense, care, gas-jet, cold-water-spigot, and measuring tape*, and your equipment is complete. Having examined the hernia and found it to be within the realm of mechanical treatment, make careful measurement of body on the line of the hernia, and select the truss. Use common sense in the work, remembering that a coal-heaver will require a more rigid spring than a bookkeeper.

CAREFUL FITTING NECESSARY.

Any one who has worn a truss, or has had much experience in fitting trusses, knows that a small fraction of an inch misplacement of a pad or slightly too much or too little pressure means trouble and dissatisfaction.

In the care of fitting, and the assurance we give to each customer that we will gladly adjust and readjust the truss until it is perfectly satisfactory, is, I am sure, the secret of our

*The truss we carry is the "Seeley," made by Chesterman & Streeter, 25 Eleventh St., Philadelphia, Pa.—M. L. McC.

success in the business. No customer of the druggist appreciates more sincerely the "make-good" plan, and if satisfactorily fitted, advertises you more effectively than does your truss customer.

Often a truss of the right size and shape fails to fit as you know it should, and carefully examining the contour of the body, you find some irregularity of form which causes the trouble. Then it is that the *best* feature of the hard-rubber truss is seen. It can, with care, be fitted to all of these irregularities. Pass the part you wish to shape carefully through a gas or alcohol flame until you think the desired change is made; then, still holding it firmly, place it for a few moments in cold water until its form is fixed. In my twenty years' experience I cannot recall one case of a

truss being brought back and definitely left on our hands. We have tried to give satisfaction and have succeeded.

A SATISFIED CUSTOMER.

To-day, as I am writing this article, a gentleman came into the store suffering from a truss that had been fitted, or rather mis-fitted, on him yesterday. At a glance we saw the truss was too large for him. It had been purchased from us but was not fitted by us. We replaced it, without charge, and sent the customer away comfortable and happy. Will he remember that? Well, he will and to our advantage, too!

Oh! yes, if you give thought and care to the fitting of trusses, it will pay you. IT HAS PAID US.

CAREFULNESS IN PRESCRIPTION WORK.

Twelve Cardinal Rules to be Followed in Dispensing—Habits of Care and Precision which Should Be Cultivated by Men Engaged in Compounding.

**By OTTO RAUBENHEIMER, Ph.G.,
Brooklyn, N. Y.**

In prescription work I follow 12 cardinal rules. They are:

1. *The reading of the prescription directly in front of the messenger or quite especially the patient should be avoided, if possible.* Frequently, very frequently, as every dispensing pharmacist knows, the prescriptions are not written very plainly or distinctly, and any hesitation on the part of the pharmacist, either by motion or expression, is very apt to shake the public confidence in both pharmacist and physician. Should there be any doubt about any ingredient in the prescription or for any other cause, then it is best to inform the patient that the medicine will be sent to him.

2. *Writing name and address of patient on the prescription.* In case the physician has neglected this, then the pharmacist should do so, as thereby the prescription can be easily identified. Furthermore, this will be a help when compiling a mailing list of customers.

3. *Writing of the label* should be done next. This has the following advantages:

(a) It gives the pharmacist another opportunity to carefully read the prescription and directions.

(b) It brings to notice any overdose or incompatibility.

(c) It allows the ink on the label to become thoroughly dry by the time the medicine is finished.

4. *The compounding of the prescription*, in my opinion, should be done behind a closed or partly closed prescription counter or even in a separate room. Although this somewhat secret procedure is not followed by some pharmacists, I believe it is better for the patient not to observe how his medicine is dispensed.

To illustrate this more fully, I might cite the following instances:

(a) The prescription calls for a portion of a proprietary preparation. Would it be well to let the patient see how you fill the bottle from the ready-made package?

(b) The prescription calls for a single ingredient, which merely requires the weighing out of a simple article, say one ounce of powdered boric acid. The physician evidently does not want the patient to know that he is ordering boric acid. If he did, he would not have given him the prescription but told him verbally.

(c) Should you measure an ingredient in full view of the patient and you accidentally measure more than required and you pour some back into the stock bottle, then this procedure would give the patient the impression that you are not a careful dispenser. The same is true in weighing.

5. *All ingredients entering the prescription* should then be brought to the dispensing counter, as this acts as a check. In doing this the names of the ingredients are read on the prescription, are again read when bringing the articles to the prescription counter, again when



Otto Raubenheimer. Ph.G.

dispensing, and again when returning the containers to their proper place.

6. *The weighing and measuring should be done carefully and accurately.* I am very sorry to say that a great deal of guesswork is frequently done at the prescription counter. When the pharmacist once gets into this habit, it is very difficult to break him off it.

7. *The compounding should be done with skill and neatness.* I have seen pharmacists behind the prescription counter who were graduates and doctors in pharmacy and were doctors of philosophy, but who made a terrible muss when compounding mixtures, powders, pills, etc.

8. *Do not be disturbed when compounding* a prescription, either by conversation or store duties, as this will distract your attention from the prescription and thereby give rise to errors.

9. *The checking follows the compounding.*

Having the ingredients and quantities freshly in mind, the dispensing pharmacist should be able to recall them from memory and thus check the prescription with another clerk or assistant.

10. The next very important step is to make, if necessary, *a notation on the prescription*, so as to assure the preparation of the medicine in the same manner when repeated. The rotation in which the ingredients are mixed can be done by prefixing them with numbers 1, 2, 3, etc. The size of the capsule or cachet should always be recorded and in capsules one should indicate whether "dry" or "mass." In pills it is necessary to note the excipient used and also the weight of the finished pill mass. Every pharmacist knows how annoying it is to have the patient bring back the capsules or pills with the grievance that they differ in size from the last lot, or that the mixture has formed a precipitate, while the last time it was compounded it was perfectly clear.

11. The carefulness of the dispensing pharmacist should extend to the *selection of the container*. For instance, mixtures which are to be protected from the light should be put in amber bottles, and medicines marked poison on the prescription should be dispensed in special poison bottles. When the physician orders an internal medicine and an external application at the same time, and often in the same quantities, it is a safeguard to dispense the external use preparation in a bottle of different shape or different color. As an illustration I submit the following two prescriptions for the same patient, received at the same time only a few days ago:

- (1) Tinct. Echinac. Angust., 1 fluidounce.
 Signa: Ten drops in water after meals.

DR. N.

- (2) Lig. Cresolis Comp., 1 fluidounce.

Signa: Ten drops to 4 fluidounces of water, for local use.

DR. N.

The principal danger in these two prescriptions lies in the fact that in each case the dose is ten drops, to be administered internally on the one hand and locally on the other. Should both of these prescriptions be dispensed in bottles of the same size, the same shape, and the same color, it might give rise to confusion, especially since the color of tincture of echinacea and of compound solu-

tion of cresol is about the same. As one of the careful pharmacists, I took the special precaution to dispense the tincture of echinacea in a regular one-ounce prescription bottle, but put the one ounce of compound solution of cresol in a *different shaped two-ounce amber bottle*. I did that to prevent confusion on the part of the patient. I thereby used *three safeguards*, namely, *bottles of different shape, of different size, and of different color*. Some countries even have special laws to that effect, so that a preparation for external use can be readily distinguished from a medicine for internal administration.

Sometimes it happens that a physician orders pills or powders for different patients in the same family. In order to avoid confusion I select, in such cases, different colored boxes.

12. Last, but not least, the *labeling and finishing should be done neatly*. I have always been in the habit of writing the number of the prescription also on the back of the label. This helps to reveal the number when the medicine is to be renewed and the label is badly soiled. I also mark the number of the prescription on the bottom of all the pill and powder boxes, showing that box and cover belong together and helping to detect any confusion in the directions. Besides the customary external use labels, I also attach, as an additional safeguard, bright orange-red labels

with heavy black letters, which I had made in two sizes:

FOR
EXTERNAL USE

FOR EXTERNAL USE

Conspicuous labels consisting of black lettering on a red background.

I have adopted this idea from a custom in France, where this orange-red label has been made compulsory by a ministerial *décret* of June 25, 1855, owing to the many confusions between external and internal preparations. Particulars can be found in French Codex, 1908, pp. 950-952.

In conclusion, I again want to reiterate that *carefulness should be the watchword of every pharmacist* and that constant vigilance should be exercised in the compounding of prescriptions.

It is furthermore necessary that the preceptor in the store and the teacher in the college should take special pains to impress the apprentice and student with the great responsibility of the pharmacist to the public. When this is understood and practiced, then the pharmacists will be more professional and will be more respected by physicians as well as the public.

TOM, DICK, AND HARRY.

By MAXWELL BUKOFZER.

Tom is a druggist to the core,
He calls his own a little store,
That yields a living and no more.

If Tom, whose business is not large,
And, hence, a clerk cannot support,
Leaves for an hour his spouse in charge,
Woe! there is trouble with the "Board."
For did not she—the ghastly crime!—
Illegally acquire a dime,
When she, for fever, ague and chills,
Dispensed a box of quinine pills!

Dick runs a paint shop right next door;
Of course, of drugs he knows no more
Than Tommy does of Hindu lore.

If Dick, whose business is not large,
And, hence, can just a boy afford,
Leaves him all afternoon in charge,
There is no trouble with the "Board."
What of it, that the boy's been seen

To sell, unlabeled, Paris green
In paper bags? Dick gets the dough.
He's not a druggist, don't you know!

Now, Harry never kept a store,
As scribe he ambled to the fore;
He grinds out formulas galore.

When Harry from his throne called desk
Tells womenfolk how to preserve
Their nose from wrinkles, why, his task
Is as stupendous as his nerve.
He knocks poor Tommy every chance,
While never giving Dick a glance,
And though his brain leaks through his fist
He poses as a "philanthropist."

The moral is, if you should query:
There is between Tom, Dick, and Harry
In this great country of the Free,
A difference that the Blind can see!

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

(Continued from April BULLETIN.)

CHAPTER V.

SCHEMES AND SIDE-LINES.

When a man is trying to make a financial success of a drug store in a country village of 2000 people he needs to sell almost anything that those people will buy at a profit to the store.

My store carried a good drug stock, but it



Frank Farrington.

did not stop there. It handled stationery and books of course, and as opportunity offered I tried out various side-lines, some of which proved profitable and were retained, and some of which were later discarded as unprofitable.

SOME UNUSUAL SIDE-LINES.

I made a nice little profit out of a Rambler bicycle agency for a time, although I did not

carry any stock. When the so-called bicycle craze subsided, I let that business go.

Agencies are pretty good profit makers for the man who is something of a salesman. I found that I could sell a few typewriters, and I held an Underwood agency for several years until the company discontinued selling through such sub-agencies. The machines were sold at full prices and afforded me about 25 per cent profit. For the druggist who handles stationery the line of typewriters is a good one.

He needs a machine of his own with which he should be familiar, and he should be able to demonstrate its efficiency to some extent. Being right on the ground, he is in close personal touch with many acquaintances who are talking of getting machines, and they will buy through a local agent rather than from an outsider if they are pleased with his machine. In cases where the customer is too much for the agent to handle, he can call in a company salesman to close the deal and divide the profits.

Schools and public offices are good typewriter prospects, and an exchange in which their old machine is taken pays the agent just as much profit usually as a sale. There are a good many standard machines which will establish local agencies.

TYPEWRITER SUPPLIES.

Along with these goods a line of typewriter supplies may be carried, or they may be handled without any agency of a machine. The stock does not run up into a large sum of money. There should be ribbons in black and purple, record and copying, for all makes of machines, though the same ribbon fits several machines, so that this does not mean separate

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numbers for all possible makes. Ribbons are easily sent by mail at low cost, so that the stock can be filled up two or three ribbons at a time.

The best way to work up the supplies business is to canvass every local typewriter user



Mr. Farrington's present home in Delhi.

at least once a month. Of course outside agents are doing this in your town all the time, but the dealer who gets busy and covers the ground can get the business, and if he is at all successful he will soon find that many of the agents are skipping his town as unprofitable.

Ribbons pay a first-class profit, good grades costing about \$5.00 per dozen and retailing from 75 cents to \$1.00 each. Typewriter papers should be sold at list, from which the dealer receives 40 per cent and 2 per cent. Job lots do not develop trade so successfully as does a standard line of good papers in boxes with the number on each box, so that the user can come back and get another box of the same paper by simply noting the number. Users of paper who buy by the box are very apt to want to duplicate the same exact paper, as they will be making up some document in which they want to use identical paper for all pages.

FOUNTAIN PENS.

Fountain pens are very generally sold in drug stores, and I found the plan of keeping the stock full of great help. A good stock makes more sales than a small assortment. It impresses the customers, and it is more likely to attract the attention of visitors who did not come to buy pens. I adopted the policy of letting all pens go out on ten days' trial free,

with the privilege of returning them at the end of that time if not satisfactory. Of course when a man showed enough interest to take a pen and try it for ten days we expected to make a sale eventually. We would exchange pens with him as many times as might be necessary to get one that suited him, even sending to the factory to get one specially adapted to his needs or fancy.

The manufacturers kept our stock in shape. Any pens soiled or marked in trial were done over without expense, and we issued a very liberal guarantee with each pen, agreeing to replace at any time within a year any part except the gold pen if broken by use, misuse, or accident. The line we carried gave us 40 per cent discount from the list prices and ran from \$1.50 to \$7.

Of course we carried cheaper pens at 25 cents, 50 cents, and \$1, but we never recommended or guaranteed them. If a man wanted a cheap pen and would not pay more than it cost, he got it, but he took all the risk himself. We only warranted the cheap ones to work when delivered to the buyer. Of course if a customer came back with one that had devel-



Some outdoor signs made by painting packing case tops white and then lettering them simply.

oped a manifest imperfection we took it back and returned it to the maker for credit.

Fountain pen sales help the sale of fountain pen fluid and fillers, and we made it a point to

tell customers that we had the best ink for that pen, and they came back for it.

HOW TO HANDLE CANDY AND GUM.

Candy is scarcely a side-line in a drug store. It is one of the standard lines and a good one. Perhaps not all drug stores, though, realize the importance of handling it right.

First there should be an agency for one of the high-grade and popular advertised kinds, something standard. This will retail at 80 cents a pound. Then there should be a cheaper line at 50 cents or 60 cents, and another popular box of about a pound for 35 cents. And there ought to be always on hand a full supply of attractive 5- and 10-cent packages which should be displayed on the counter with cards on them.

Window displays of these goods can be made most attractive. I know of nothing you can display in the window that will bring people in as quickly as candy, opened so that it will make people hungry to see it. Chewing gum is usually neglected and shoved into a corner. Get it out and push it. Put it in the window with a large card that every one can see, and you can quadruple the gum sales.

It pays to carry all kinds of gum for which there is any demand, and a good way to arrange them if space is limited is to have a large tray that will show several sticks of all makes and keep the entire assortment in it in a very conspicuous place. Have it so that people can help themselves when you are busy and throw down their nickel and not be obliged to wait.

Let it be understood that every box of candy you send out is warranted fresh, and

that if it turns out otherwise it is the fault of the manufacturer for sending you a poor package, and take it back without a word and refund the money or hand out a new package. If you are doing business with a maker who will not stand behind your guarantee, change brands.

THE BOOK QUESTION.

Even dealers who do not handle books will find it profitable to put in a line of the popular copyrights that sell everywhere now for 50 cents and include all the popular novels of a year or two ago. There are hundreds of titles in these, and they can be bought from 35 to 38 cents according to quantity. A rack of them kept full of late titles will make sales in any drug store.

The circulating library scheme usually proves a failure as far as net profits go. Of course anything that brings in more people may prove worth while even if it does not individually pay a profit. Still the circulating library should be viewed with suspicion unless there is a manifest demand for it. It takes up valuable space and is a source of much complaint on account of the difficulty in keeping on hand the books people want. I tried renting a library, and after a year or so threw it out. It was a money loser. I established a library of my own, and that also lost me money. I took one on a commission basis, and that failed to develop any business. If a man sells books he does not want a circulating library in the store anyway. I took the matter up because my chief competitor had one and I needed it in self-defence. I made a lower rate than his contract allowed him to

A Talcum Bargain

A pound package for what you've paid for 4 ounces

We are offering just now, while they last, the best value in talcum powder that we ever had.

It is a full pound of fine violet perfumed talcum in a pretty box with a raised sprinkle top for 25c.

We guarantee this powder to give satisfaction. If it isn't entirely satisfactory, it won't cost you a cent. We will refund your money on request.

We have lots of other kinds at 10c, 15c, 18c, 20c etc., but this pound package is the prize winner so far.

THE FARRINGTON DRUG STORE

ALL POST CARDS

all next week

ONE CENT EACH

This means that all next week we will sell all kinds of souvenir postals for a penny apiece.

We have a great variety of Delhi view cards, comics, foreign views, state capitols, birthday cards, etc., etc.

See the new Dolt Delhi Cards, regular 2-for-5c card. Next week one cent each.

No mail orders filled.

None sold to dealers.

FARRINGTON'S DRUG STORE

A PEN THAT WRITES

Who wants a fountain pen that won't write?

The woods are full of fountain pens that are called "Best" by their makers.

Lots of these pens are called anything but best by their users.

But when you find a man with a Parker pen in his pocket, you find a man with satisfaction in his mind.

We sell Parker pens at all prices from \$1.50 up and we guarantee every one of them.

We'll let you take one for ten days and if you don't like it we'll refund your money.

Try one of the new "Jack-knife" pens, the kind that you can carry in your jack-knife pocket and it won't leak or get out of order.

For summer when vests are laid aside, a pen that you can carry right in the trousers pocket is popular. We have that pen! \$2.50 for the best grade.

Come in and we'll show you how you can get a Park - pen for nothing.

FARRINGTON'S DRUG STORE

do, and this resulted in keeping my customers from patronizing his library and even brought some of his trade to me, but as a library for revenue only it was a failure. A man has to do such things sometimes. But if possible it were better to leave them alone and spend the time and energy on some legitimate line.

Among other lines which I developed with great profit were stock foods and veterinary remedies. Sporting goods paid for a time, but finally proved unprofitable on account of competition which specialized in that line. Fancy goods were thrown out for lack of room.

TEMPTING BUYERS.

One of the great reasons for the success of the department stores in getting women into the store is the fact that they always have something new to show to the people. A woman likes to go to a store that always has attractive little specialties on exhibition in the way of new things at popular prices. The drug store sells as many lines of goods that are alluring to women as any kind of a store, but the average druggist does not take pains enough to keep something new out in a conspicuous place so that there is always a temptation to the customer to buy.

I have put in many specialties temporarily, pushing them as long as they attracted trade and moved off rapidly, only to throw them out when they began to drag, replacing them with something different. The drug store cannot afford to give up space permanently to slow-moving novelties and goods that are salable only for a short time.

One little annual plan or scheme that I inaugurated that became a success as a business getter was an "Annual Talcum Sale." One week in May each spring I put out a special offer on some brand of talcum powder, often choosing a new line that I wanted to introduce, or some particularly good proposition secured by a quantity purchase. The price made always allowed a good profit, although it was usually an offer of a regular 25-cent box for about 15 cents. One season it was a full pound package.

I offered a \$2.00 cash prize to schoolchildren for the best advertisement of school tablets written by a student in a Delhi school. I specified that the ad. must be entirely the work

of the child submitting it and that it must be of suitable size to fit my newspaper space. Here are the two winning ads., the judge having decided that these two were of the same quality, and the prize being divided equally between them:

NO. 1. TABLETS: SCHOOL TABLETS.

Tablets large and tablets small,
Tablets here for one and all,
Tablets here for you and me,
If you don't believe it, come and see.

Tablets here you're sure to find,
Cheap and of a better kind;
Farrington's the man to sell
Tablets, and he treats you well.

Money back if you want it.

NO. 2. ATTENTION!

It is hard for some children
who buy tablets to decide
which place to go. If you
go to Farrington's once, you
will have no doubt where to go
in the future.
Rough and smooth paper.
Pretty and fancy covers.
Come and look them over
every one.

FARRINGTON'S DRUG STORE.

Those are not bad advertisements at all for a school child to write—in fact their simplicity and directness is something of a model.

A little plan which stimulated the sales on writing paper was the use of the offer below. It was printed on both sides of a white card, size about 2 by 5 inches. These were mailed to the ladies in bright-red envelopes which they just fitted.

On one side of the card:

USE THIS CARD.

This card is good for five cents to apply on a purchase of either of the pound-paper propositions on the other side if used within ten days after its receipt.

FARRINGTON'S DRUG STORE.

(Over)

On the other side:

THE WAY TO BUY WRITING PAPER.

We sell a fashionable, linen fabric paper in the stylish shape and size for 35 cents per pound of 100 sheets. The envelopes to match are 25 cents for fifty. We sell the 100 sheets of paper and 50 envelopes for 50 cents.

This makes this fine paper cost you less

than you pay in buying an inferior paper by the box.

We have a low-priced fabric paper that we sell for 28 cents for 80 sheets of paper and 50 envelopes. This is a great bargain.

FARRINGTON'S DRUG STORE.
(Over)

TEACHING THE GROCER A LESSON.

Delhi has been a full-price town on patents since the Spanish-American war, when we made the imposition of the tax an excuse for raising prices to list. Recently, however, a cut-rate grocer came to town and proceeded to stock a half-dozen of the best selling proprietaries which he immediately advertised at cut rates.

The plan that I devised to make this work as much as possible to my advantage was this. I issued a circular letter to all of my mailing list, covering the whole town. In it I announced:

SOME SPECIAL PRICES.

Here's a chance to save some money at Farrington's.

We offer bargain prices as below for a time. Look over the list and see if there isn't something on it that you need.

Then followed a list of the cut-rate patents at the same prices that the grocer had made. Also I included a number of other specials.

The effect of this letter was to get for our store the credit of the reduction in the prices and to bring us the business on them. Our letter reached the people before many of them had read the cut-rate newspaper ad., and while I made no mention of the matter in the papers and thus avoided antagonizing the grocer, I got the business. His sales were so slight on the patents that he never bought a second lot.

While poetic ads. are not as a rule very profitable, still something of the sort occasionally adds spice to the campaign. Here is one that I had printed on cards and mailed to users of typewriter supplies. With very little change it may be made to fit any line of goods and may be used as a newspaper advertisement:

REMEMBER JOHN!

John Jones it was who ran a bank

And ran it on the square.

He treated all, whate'er their rank,

In manner just and fair.

He borrowed from both rich and poor
Whatever they would lend.
He loaned to all who were secure
And wanted cash to spend.

But though so square, and honest quite,
John never read our ad.
And now his bank is closed up tight,
His face is long and sad.

Moral:

Though you may think you're short of naught
That we can well supply,
Remember John, and don't be caught.
Know when and where to buy.

Buy typewriter stuff, stationery
and law blanks of Farrington.

Here is a plan that I used to stimulate cash buying and to promote interest in the candy department. It worked very satisfactorily for a time, but did not prove a permanent success. The public seemed to tire of it. The offer read as follows:

CANDY FREE FOR YOUR CHECKS.

The cash register checks we give out with all cash purchases are good for ten per cent of their face value in exchange for candy.

For instance, when you have bought a dollar's worth of goods, your check can be exchanged for ten cents in confectionery.

Why not get the benefit of this offer?

Anything you need that we sell ought to save you some money on a candy purchase. And every time you buy candy, you get a check which is good on the next lot of candy. A 40-cent purchase of candy gives you a check worth 4 cents on the next candy purchase.

Save your checks!

There is no better candy anywhere than we sell, and we guarantee every package to be fresh. If it is not satisfactory we will give you back your money.

Have you tried the Chocolate Dipped Maraschino Cherries yet? 25 cents a box.

The best business-getting scheme I ever worked and the ways in which I made use of the cash register as a business-getter will be described in the next chapter.

(To be continued in June.)

How the Druggist's Sundries Are Made.

SECOND PAPER: TOOTH-BRUSHES.

Where the Bristles and the Bone Handles Come From, and How the Brushes are Made by Hand in Europe—The Bristles Tied in by Peasants in Their Homes—Points to Consider in Judging the Goods.

By J. ADDISON BOWNE.

The editor of the BULLETIN OF PHARMACY has asked me to prepare a paper on the manufacture of tooth-brushes. Although I have been engaged in the importation of brushes for upwards of thirty years, it is difficult in a limited space to describe their manufacture, and particularly to tell how they may be judged and selected to advantage. The retail druggist has so many different articles to look after that it is almost impossible for him to give enough special attention to tooth-brushes to really enable him to determine their quality.

Furthermore, this is a technical business, and it would be quite out of the question for me to describe adequately the points necessary in the proper selection of brushes. This requires years of study, but some of the factors to be considered are:

1. Quality of the bristles.
2. Size and finish of the bones.
3. Shaping of the bones, artistic or otherwise.
4. The *tout ensemble*. The general appearance of the brush—does it please the eye, is it agreeable to handle, etc., etc.?

WHERE THE BRISTLES COME FROM.

In describing the manufacture of tooth-brushes, the first thing to consider is the bristles. As everybody knows, these are the hair of hogs or wild boars. Some of these boars grow to an immense size with a luxuriant growth of bristles along the back. The hogs must be at least nine years old before the bristles are of proper length and character for manufacturing purposes, and even then only those of the male can be used.

The bristles come mainly from Germany. The chief market is the Leipsic Fair every spring, which is attended by the largest manufacturers of brushes and dealers in bristles. The bristles are sold in casks, and the manufacturers wash, sort and dress them for their

own use. Very frequently, if the color does not turn out to be as white as desired, acids are used to bleach the bristles. One must beware, however, of tooth-brushes in which the bristles are *too white*, for they are acid bleached, and in the process the life of the bristles has been destroyed. They are pretty to the eye, but are not durable. Select a brush in which the bristles are a *cream* white instead of a *dead* white.

Some of the best manufacturers, indeed, absolutely decline to use an acid bleach, because the bristles "mat" after being used a few times. As for the stiffness of bristles, many of the most prominent dentists deprecate the use of brushes in which the bristles are extremely hard, claiming that their continued employment cannot do otherwise than affect the enamel at prominent points. They advocate a reasonably stiff brush, but one not too hard.

THE BONE HANDLES.

The next thing to be considered is the bones used for brush handles. These are secured from the United States, Australia, and the Argentine Republic. Until within the last few years the United States furnished the larger part of the supply, but we are now killing our cattle so much younger than we did formerly that the bones are smaller and are consequently not so desirable for fine goods. Manufacturers have therefore been obliged to look to the other two countries for their supplies of the better grades.

For fine brushes, such as those made in France and England, the *thigh* bones of cattle are more largely employed. In Japanese goods, which are much cheaper, the *shin* bones are more generally used.

Every year both bristles and bones increase in price. This is because the demand is constantly increasing, while there is no additional increase in the supply. So far it has seemed

impossible to find a substitute for bristles, but it would look as if some other material must eventually take the place of bone in the handle. During the last few years celluloid has been used to some extent, even though it costs more than bone. If bone, however, continues to increase in cost, it seems probable that it will be replaced by celluloid or some other material yet to be discovered.

MAKING THE BRUSHES.

In order to explain the method of manufacturing bone tooth-brushes, you will understand that the bones employed are, with the exception of cheap brushes or those of small size, the thigh bones of cattle, each one of which makes six tooth-brush handles. There is much scope for skill and art in the shaping of handles, and there is a great difference between brushes in this respect. After the handles are shaped they must be drilled for the manufacture of the brush proper. First the face of the brush is drilled, and next the longitudinal holes are made; the latter start at the end of the head of the brush, and they engage every one of the lateral holes previously drilled. This drilling of the longitudinal holes is a question of hand labor and is a matter of real difficulty. This will be realized if you will take into consideration the fact that the drill employed is in the neighborhood of three or four inches in length, and has about the diameter of an ordinary pin. Unless it is very carefully manipulated, it is apt to fly out at either side of the brush head, in which event the piece of bone is absolutely spoiled for further employment so far as the manufacture of a tooth-brush is concerned.

After this shaping and drilling have been done, everything is in readiness for the introduction of the bristles. The bones so prepared are sent out to people within a radius of ten or twelve miles, who there, in their homes, put in the bristles. This work is tedious but not exceedingly difficult.

TYING IN THE BRISTLES.

In the first place, the "mounter" (as the person is called who does this portion of the work) must insert a piece of cord into the longitudinal holes, and at the last hole of the row nearest the handle must pick up the

end of the cord with an excavating needle, which is very much like a miniature crochet needle. He must then tie a knot in the end of the cord, and with a crooked needle force this knot beyond the last hole, which thus can serve as an anchorage for that cord. Then, in every hole in the brush, he must pick up his cord with the "crochet" needle, making a loop: with his fingers he now takes the necessary amount of bristles, slips them under this loop, and pulls the thread through the longitudinal hole until the bristles, with the help of the fingers, are in position.

From the foregoing it can be easily seen that the stability of each tuft of the bristles depends upon the proper anchorage of the cords at both ends. If the "mounter" should break the cord in attempting to force too many bristles in a hole, and should fail to start the row afresh, the entire row of bristles is improperly fastened and is likely to come out during the first few times the brush is used.

The next operation is the trimming. This is done by a very ingenious machine, and constitutes, in the writer's opinion, the greatest advance in tooth-brush manufacture during the last 20 years. After this come the operations of polishing, stamping, boxing, etc., all of which are very simple.

THE ENGLISH OR "WAX-BACK" BRUSHES.

In the English style of brush, that having stripes in the back of the head, the process of manufacture is the same as the French up to the drilling of the longitudinal holes. Instead of the longitudinal holes, a very small circular saw is used, and with it the operator saws about half-way through the back of the head, each groove thus made engaging every one of the holes previously drilled in the face. The bristles are then drawn in directly with wire, this wire lying in the small groove or slot made by the saw. The slot is subsequently filled with wax and rendered impervious to water—hence the term "wax-back" by which these English brushes are known to the trade.

CELLULOID BRUSHES.

The brushes made of celluloid are almost entirely manufactured by machinery, and the bristles are fastened in by so-called "anchors."

But while the better goods of this class have given satisfaction, there have been imported so many cheaply made brushes, in which the manufacturers have employed very poor bristles, that the sale of the better grades has fallen off considerably. Even with these better celluloid goods, the bristles are inserted in such manner that the purchase of them is a lottery. This is for the reason that the "anchor" is such a very thin piece of steel that in forcing the bristles into the holes many of them are cut in half—a fact that is not discovered until the consumer has used his brush a few times, when he has that disagreeable experience of having the bristles come out in his mouth.

A NEW MACHINE.

A new system of manufacturing tooth-brushes by machinery has been brought to the writer's attention. The bristles are forced

into the holes by a piece of soft metal, thus preventing the cutting of the bristles. This metal subsequently hardens and absolutely locks the bristles in their proper position—locks them so tightly that it is next to impossible to pull them out with a pair of pliers. Each tuft is fastened independently of all the others. This is an American invention, and a number of machines are now in process of construction. The purpose is to make tooth-brushes both with bone and celluloid handles, and I believe that we shall see some of them marketed very shortly. By making brushes in the United States by machinery, we can overcome the proposition of cheap foreign labor, and by saving the *40-per-cent* tariff we can not only get brushes cheaper, but can in addition make better brushes than have ever before been produced. So far, however, practically all of the brushes on the American market have been made abroad.

"MY BEST PAYING SIDE-LINE."

The Third of an Important Series of Articles by Different Druggists in which Each Writer Tells what Class of Goods has Paid Him Best—This Time It Is Razors and Shaving Supplies.

**By CHARLES W. HOLZHAUER,
Newark, N. J.**

One of the best paying side-lines we have featured has been razors of all kinds and shaving accessories. Shaving soaps, brushes, and lotions have always been sold in drug stores, and it is an easy step to add to these, razors and strops and all the other items which are used by men who shave themselves. And the fact that the man who shaves himself uses at least a half-dozen different articles, gives a very good opportunity for the sale, by suggestion, of several of them at one time, thereby increasing the volume of the sale. At least half of those who buy a razor will buy a strop, and who cannot make a sale of soap along with a lather brush? Beside these, a hone, extra blades if a safety razor has been sold, a stropping machine, talcum, witch-hazel, and bay rum naturally suggest themselves. A very good business may be worked up in the

resharpening of old blades. The effort is worth while, for all shaving supplies as a rule pay a good profit, as good probably as any drug-store side-line.

USE A LEADER.

To call attention to the fact that we are headquarters for shaving materials, we make a leader of a razor for 49 cents. We bought a lot of razors from the importers which we could sell at this price and still make a profit. This at once attracted men to the store. Upon the same counter upon which these 49-cent razors are displayed we show razors up to \$4.00. Very frequently the higher priced ones are sold, and we always make it a point to show them. At least quarterly we make a special window display of the goods, and always keep them in plain sight in the store

when there is no display in the window. Working with the window, a newspaper advertisement, preferably on the sporting page of the paper, announcing a special sale of razors will bring good results.

COÖPERATE WITH THE MANUFACTURERS.

Nearly all manufacturers are glad to co-operate with the dealers in supplying material

arranged a window exhibition is excellent, especially of some novelty. Here again arrangements can often be made with the maker of a razor to supply a competent man to show the goods. We have had splendid results from the demonstration of a self-honing strop.

Once started, a steady business will follow, for men who use safety razors are continually



A display of shaving supplies in the window of Charles Holzhauser.

for displays, and it is generally very attractive—signs, cut-outs, dummies, and mechanical figures. Often the best windows can be made with these and a small stock of goods, thus avoiding overstocking.

Demonstrations are desirable. If it can be

buying blades and many of them, to say nothing of their other supplies which often require replenishing. The point is to keep the goods in sight. Let people know that you have them and are in a position to supply all their shaving wants.

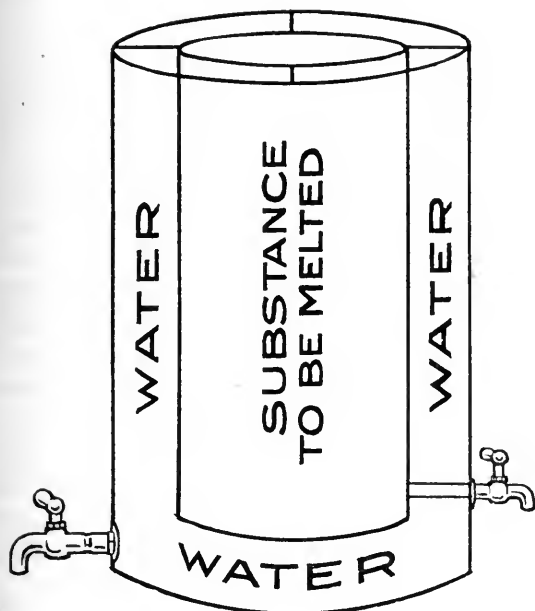


DOLLAR IDEAS

FILLING JARS OF PETROLATUM.

Henry K. Schwartz, South Bend, Indiana:

The accompanying etching illustrates a water-bath which we use in filling jars of petrolatum plain and petrolatum carbolated. The water



keeps the contents hot for a long time. The double faucet enables one to drain off the hot water and run in cold. The capacity is about fifty pounds.

CULTIVATING THE FARMER.

Daisy A. Frick, Audubon, Iowa: How many pharmacists find it hard, on busy prescription days, to keep the customer from becoming impatient when it is necessary to wait his turn! This applies more to drug stores in country towns where people rush in with prescriptions on Saturday afternoon, a time when the farmers and farmers' wives come to do their shopping and pay their weekly visit to the physician. Many of these customers are chronic patients. A cold and stormy day makes them rush in, and they are anxious to hurry out again. Each one wants his prescription filled right away so that he can get home.

While the pharmacist is busy dispensing the prescription, let the proprietor or the other clerk invite the customer to a chair and talk to him about his stock. Ask him what

he feeds, their general condition, etc. Ask him if he has trouble with hogs, whether they are suffering with worms, etc. Then talk stock food, worm remedies, and poultry food.

Almost every country drug store carries stock food and remedies as a side-line. And it is surprising to note the results of these personal talks with the farmers while they are waiting for a prescription to be filled. Many a sale can be made that would otherwise escape, and these customers, once made, are usually repeaters for the same line of goods.

In addition to the personal talk on the inside, a nice business can be developed by driving into the country and making personal visits to the homes of the farmers, soliciting sales of stock foods and stock remedies.

AN INGENIOUS CORK REMOVER.

George Sines, Pomerania, N. J.: Here is a simple little cork remover that is easily made. Take a piece of wire and make a little round finger grip in the end of it. Set the other end of the wire on a solid piece of iron, and with a hammer flatten it out into the shape of a spear-head. The sides of the spear should



be sharp and should taper to a point, but the upper surface should be flat. When a corkscrew won't remove a tight fitting cork, instead of pulling out the cork piecemeal, I use this spear cork remover. I force the head down clear through the center of the cork, turn the finger grip, and pull. Out comes the cork.

SELLING CORN PADS.

Ray S. Sisson, Decker, Indiana: When a customer asks for a corn salve or remedy and a sale is made of a ten- or twenty-five-cent item, don't stop there. Show the purchaser a package of unmedicated corn pads. Explain that by using the medicine inside the pad the drug will not get rubbed off and will have a better chance to act. In this manner the remedy can be used both day and night, thus hastening the cure. Nine times out of ten you can make an extra sale in this way.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

THE COAT SHIRT RUINING THE DRUG BUSINESS.

DEAR BILLIE:

There has been a matter of great importance on my chest for some considerable time, and unless I get rid of it in some way it is liable to result in a case of pneumonia or worse.

In the many years gone by, I remember what a fine return we received from various hair tonics, and what a large number of men were noticeably bald-headed. It seemed to my young eyes that nearly every man past forty was more or less bald, and that we had rich material to work on. Many and many a nice preparation costing twelve or thirteen cents we unloaded on the bald-headed man for one dollar per. We felt proud of our business sagacity, and frequently we wondered why the boss didn't raise our pay when we sold five or six bottles in one week and then got the victims as steady customers for many a succeeding bottle.

On re-entering the business again some years ago, my first thought was for these old income-bringing formulas, and I proceeded to make a variety of both the dry kind and the wet kind, the sticky kind and the quinine kind. But they did not sell well, and some men even insinuated that I had better mind my own business instead of always suggesting that my "Hair Invigorator" would do them good. I became discouraged and quit trying to sell the stuff, but I did *not* quit the problem, and I will now bring it before you.

THE COAT SHIRT is the sole and entire cause of all our loss of income from hair tonics, and we must organize and push the coat shirt and all its modifications into the far western sea. Put the coat-shirt people out of business! If we break them let us extend the hand of fellowship and set them up in the drug business, but never let it be said that a set of men who will work nineteen hours a day for seven days in the week and all the rest of the year for less compensation than a

side showman at a circus are so weak-kneed as to stand this curse any longer.

Among the office force of a manufacturing pharmacist was a man of fine appearance who was asked quite often to chaperon parties through the works. It was his custom to keep a nice shirt of the old top-and-bottom type handy in the back office, and when called on to come to the front and chaperon any guests he hastily slipped on his fine shirt and was ready to fare forth. It was noticed that he kept getting balder all the time, and finally the attention of the whole force was turned his way as furnishing a very interesting subject for solution.

Without going through with all the wearisome details of the story, suffice it to say that it was finally proved beyond reasonable doubt that the whole cause of the man's baldness was the friction set up in pulling this shirt over his head. In giving it a quick flit off and on he very materially raised the temperature of his hair and head, induced dryness of the scalp, breaking of the hair and subsequent baldness. This suggested the manufacture of the coat shirt, and it has kept on till now a department store clerk looks in scorn at a man who mildly suggests that the "high-ball" shirt suits him the best.

Let us, then, band together to put down this menace. And in conclusion, Billie, if your head is bald, very bald, it redounds to your credit, for don't you see that the baldest man must be the one who has changed his shirt the most often?

Down with the coat shirt!

Meridian, Miss.

GEO. W. STAPLE.

A REAL SUICIDE THIS TIME!

To the Editors:

A few years since, when I was clerking in a drug store in the central part of Iowa, a man, a stranger to me, came into the store and asked for a bottle of strychnine. After selling it to him and going through the usual formalities of making a record of the purchase of a poison, he asked me whether it was very poisonous. Of course, I informed him that it was, and that it would kill anything it came in contact with, meaning of course animals.

He went away, and I thought nothing more of the deal until the following morning, when

on my way to the store, I learned that a man had committed suicide in one of the hotels during the night. Being curious, as many people are about such things, and not having far to go, I went in company with others to the room where the suicide was. Much to my surprise, I found the man to be the identical person to whom I had sold the poison the day before. There he was, coat, hat and boots off. I saw one-half the strychnine there. The bottle was uncorked and lay on the window sill.

I said nothing to anybody, but went immediately to the store. As soon as my employer showed up, I told him the circumstances, how I had sold the man the poison with which he afterward took his life.

It is needless to say that the transaction was not wholly satisfactory to the proprietor because of the unsavory taint and the very liberal advertising the public generally gives the drug store where poison is obtained.

The man, however, must have been an old bachelor, or at least had no near friends or relatives, for much to our surprise and quite luckily for us, too, no one ever came to inquire into the matter. Thus we were saved considerable embarrassment. ARTHUR E. PRATT.

Waukon, Iowa.

REMOVING WALNUT STAINS FROM THE HANDS.

To the Editors:

A correspondent, E. A. L., in your issue of December, 1911, asks for something to remove walnut stains from the hands. I have had many inquiries about walnut stains, and some years ago I wrote to the *Chemist and Druggist* of Australia for information, and the editor replied:

"Two things occur to us that may be tried. First, wetting the fingers and rubbing them with crystals of hyposulphite of sodium, and then dipping them in a dilute solution of oxalic acid. This would generate SO_2 , which might bleach the stains. Another method is to dip the fingers in a solution of permanganate, allowing them to soak for a few minutes, and then dip them in oxalic acid. We have found this to remove many obstinate vegetable stains."

The former treatment was fairly satisfactory when given a trial, though the whole of

the stain was not completely removed. The latter has not been tried here. The trial of chlorinated lime was not a success, but it was not used with acetic acid as suggested by yourself.

J. S. DODDS.

Akaroa, New Zealand.

WHAT ONE STORE DOES ABOUT SHORTER HOURS.

To the Editors:

From time to time I have read articles in your journal and in others on the subject of Sunday closing. Perhaps the method in vogue in our store may be feasible in some other store similarly situated.

Our Sunday hours are from 8.30 A.M. to 12.30 P.M., and from 5 to 8 P.M. Every Sunday, therefore, this store is closed from 12.30 to 5 P.M. These hours were arranged by the late Mr. Leo Eliel when he opened this store in 1900, and there has been no change and practically no complaint from our patrons.

The force works as follows: There are four of us in the store—manager, senior clerk, junior clerk, and apprentice. We divide into two shifts. One Sunday the manager and apprentice are on duty; the next the senior and junior clerks take their place. Thus each shift has every alternate Sunday entirely free of duty.

There is no unity among the stores of the city, each doing as the owner sees fit, and most of them keeping open all day.

South Bend, Indiana.

EMIL REYER.

PRICING A PRESCRIPTION.

To the Editors:

In regard to the pricing of the prescription which appeared on page 126 of the March BULLETIN, I would say that the price should be computed by the time it took to fill the prescription at the regulation schedule of \$1.50 per hour and twice the cost of the drugs. The prescription reads:

Strychnine sulphate.....	3/4 grain.
Extract of aloin.....	8 grains.
Extract of belladonna.....	6 grains.
Extract of cascara.....	24 grains.

Make 48 pills.

In filling prescriptions of this description it is not always advisable, however, to charge

exclusively by the hour, as some prescription-ists can work a great deal faster than others. I think a fair price for the prescription would be 90 cents. JOSEPH G. NIXON, Ph.G.

Sylacauga, Ala.

A MALE JOB.

To the Editors:

Please try to find room for this one in your freak column. Don't you think it deserves

*Mr. Druggist
please send
directions to put
quick silver on
glass by return
male
Selat Ridge, No. Va*

it? This reminds me of the story of the woman who "fell off a roof and injured herself on the back porch."

Marion, Va.

CARSON DRUG CO.

ANOTHER SWINDLER.

To the Editors:

I wish you would notify the readers of the BULLETIN of an alleged doctor who is working the druggists of this State very smoothly. He comes to a druggist, rents a space in his store, tests eyes for glasses, and sells the glasses out of his case if he can fit people. If not, he writes a prescription, taking the money in advance, and stating that the glasses will follow in a few days from a certain optical company in Dallas. But he fails to turn in the order, thus getting away with the people's money. If he could be located, we would appreciate it greatly. CITY DRUG CO.

Weatherford, Texas.

To the Editors:

I wish to say that I am a reader of all the pharmaceutical journals, and that I find the BULLETIN best of all. I think it by far the best journal published, and I always look forward to its coming at the beginning of each month with the keenest of interest.

West Paris, Maine.

L. Y. LOWE.

FLORAL DEPARTMENT.

I am paying up my BULLETIN subscription to May, 1913. Your journal is enjoyed by us knights of the pestle and mortar, from the stories of Algernon down to actual formulas and Dollar Ideas. With kind regards and best wishes for the BULLETIN OF PHARMACY, and hoping that you won't forget to jab my name down on your mailing list, I am,

Donaldsonville, La.

ELMER L. GAUDET.

The BULLETIN is a source of a lot of information as well as a lot of pleasure. I don't see how any department could be improved. And why any druggist wants to cut out the humorous part is more than I can see; for we have little enough of the comic side of life anyway. I always enjoy the BULLETIN.

GILBERT W. CLARKE.

Verona, Miss.

I am writing this to congratulate you on the many excellent features of the BULLETIN. The BULLETIN appears to be a necessity to me. My pharmaceutical digestion is always out of kilter until I have taken the monthly dose.

F. W. E. STEDEM.

Philadelphia, Pa.

For some reason or other I failed to receive the BULLETIN this month, and unless it comes very shortly I shall have to suspend business.

A. J. STRATHIS.

Doylestown, Pa.

We continue to find the BULLETIN the best journal yet, and don't want to miss a single copy.

TURNER CANNON.

McKenzie, Tenn.

The BULLETIN seems to improve with every issue. It is a welcome guest once a month.

Beaver Falls, Pa.

G. M. GRAHAM.

I receive five or six different journals, but yours I enjoy the most of all.

Arthur, Iowa.

JESSE HENRICKSEN.

The best of the drug journals—the BULLETIN OF PHARMACY!

Brooklyn, N. Y. A. PATRICK SPERO, Ph.G.

THE SODA FOUNTAIN.

PRIZE SODA FORMULAS.

The Soda Fountain conducted a contest in which it offered prizes for the best soda beverages. The dispensers submitted their favorite recipes, with the full working process, explaining each step in detail, the method of manipulation, and giving a descriptive name for each beverage. The following dish was awarded first prize of \$5.00:

TURKISH-ITALIAN SUNDAE.

On a fancy china plate place two 16-to-the-quart disherfuls of ice cream, one of chocolate to represent Italy and the other of peach to represent Turkey. Over the chocolate ice cream pour a ladleful of crushed bananas and a like amount of prepared figs over the peach ice cream. Around the base of the chocolate ice cream place halves or quarters of Italian cream chocolates; in the same way arrange around the peach ice cream similar sized pieces of Turkish paste. On the top of the ice cream representing the Turks place a large red cherry to simulate the fez or red felt or cloth cap worn by the Turks; in a similar manner place on top of the chocolate ice cream a small cube of orange to mark the Italians. On the dish between the two cones of ice cream put a spoonful of whipped cream colored with caramel to represent the war cloud hanging over the two countries. Sells for 20 cents.

This formula is not only timely, but it is attractive to both the eye and the taste. Why not feature it?

The following dishes were awarded lesser prizes:

CHARLOTTE RUSSE NUTAE.

Sweet cream, 20 per cent, 1 quart; powdered sugar, 6 ounces; extract of vanilla, 2 fluidrachms; ice cream powder, 2 teaspoonfuls; chopped nuts (very fine), 6 ounces. Mix by whipping the cream until almost stiff with the sugar, ice cream powder and extract; then add the chopped nuts and whip until the mixture will stand. Having previously made ready 1 dozen ice-cream saucers, take 24 lady-fingers, slice them into halves and place four of the halves around on each saucer and fill the center with charlotte russe. Then take a small quantity of whipped cream, colored a light red or pink, and decorate the dish, topping off with a maraschino cherry. Sell this for 15 cents. It yields a nice profit.

METROPOLITAN DESSERT.

Into a tall sherbet glass put in the order named 1 ounce of maple syrup, a ladleful of whipped cream and a No. 16-to-the-quart scoopful of vanilla ice cream. Over the ice cream place a ladleful of crushed pecan nuts and top with whipped cream and a maraschino cherry. On one side of the dish put a Nabisco or brandywine wafer.

TRIPLE-FRUIT SUNDAE.

Into a sundae glass put a No. 16 disherful of ice cream, pour over it a ladleful of crushed pineapples, then hollow out a No. 6 cone of ice cream and place it

on top of the ice cream first put on the dish. Cover this with crushed strawberry and decorate with maraschino cherries.

This makes a desirable and showy sundae and can be made from the material or supplies on hand at any fountain, large or small.

SOME VERY PRETTY DISHES.

J. B. Clark, writing in *The Liquid Dispenser*, suggests several recipes for soda beverages. They are new, extremely tempting, and make a hit. Druggists will have no trouble in getting the prices given or even a nickel more, says Mr. Clark.

CUBA PARFAIT.

Use an 8-ounce concave glass for best results. Start by putting a layer of pineapple cubes in the bottom of the glass, then one small disher strawberry ice cream; flatten this even with a spoon; now place a layer of sliced peaches on this; again one small disher of vanilla ice cream; now sprinkle some whole pecans on top and dress with a dash of whipped cream and cherry. Charge 15 or 20 cents.

ANGEL PARFAIT.

Start in the same way; use first one layer of strawberry; one small disher of vanilla ice cream, flatten; one layer of crushed orange; one small disher of New York or vanilla; sprinkle ground nuts on top; dress with whipped cream and serve. Charge 15 or 20 cents.

DUCHESS SUNDAE.

Use a fancy plate for serving. Place on plate slices of pineapple; on top of this one disher of vanilla ice cream and flatten so that the top will be smooth; cut slices of bananas and place them around top edge of the cream; dress with whipped cream in center and a cherry or strawberry. Sell for 15 cents. It is a winner.

SNOWMAN SUNDAE (NOVELTY).

Use a small plate for serving. Place on the plate one slice of pineapple; then one disher of vanilla ice cream, well rounded for body; now one small disher of lemon ice; place a toothpick to hold the head and body; now comes the arms from two long-shaped marshmallows, stuck on toothpicks and inserted on each side; use two whole red raspberries for the eyes and half of a cherry for nose and the other half for mouth. This is a scream and sells easily for 25 cents.

CRYSTAL NUT SUNDAE.

Use tulip-shaped sundae glass. One small disher vanilla ice cream, over this pour small amount of chocolate syrup, add another small disher of vanilla ice cream; over this put a ladle of fresh fruit salad and sprinkle with whole pecans. Dress with whipped cream in center and top with cherry. Sells for 15 cents.

CHICAGO SPECIAL.

Use champagne sundae glass. One twenty-to-quart disher vanilla ice cream; one twenty-to-quart disher strawberry ice cream; one twenty-to-quart disher orange ice. Over all place a ladle of fruit salad and

top with a dash of whipped cream and cherry. Sells for 15 or 20 cents.

NEAPOLITAN NUT SUNDAE.

Take your large disher and fill one-third full of vanilla ice cream, then one-third full of chocolate ice cream, one-third full of strawberry. Here you now have what is known as Neapolitan ice cream. Turn out in sundae glasses. Use any desired flavor, top with nuts and cream and cherry, and serve for 15 cents.

MUTT AND JEFF.

Slice one banana and lay it flat in a split-banana sundae dish. Set one disher chocolate cream at one end, and the same amount of vanilla ice cream at the opposite end. Cut another banana into two unequal lengths and place it upright in the cream. Top each with a dash of whipped cream. One fresh marshmallow is placed on top of each banana. Serve with a small slice of orange between the upright bananas and decorate the ice cream with a few whole cherries.

If desired, a loaf of sugar saturated with brandy or alcohol can be placed on each marshmallow and then lighted when about to serve.

This novelty must not sell for less than 25 cents.

AMERICAN BEAUTY.

Use tulip-shaped sundae glass. Place one large disher of strawberry and vanilla ice cream mixed in bottom of glass. Then place quartered banana strips on each side of the glass, coming to a point at the top. Use plenty of crushed cherries, and top with whipped cream and a whole cherry.

Put it on your menu for 20 or 25 cents.

THE FUNCTION OF THE SODA FOUNTAIN.

Not long ago the *Boston Medical and Surgical Journal* printed an editorial on the soda fountain which we are glad to reproduce. Our readers will find in it some unusually good text for a booklet devoted to the soda fountain:

"Few popular American inventions are more characteristic of the national genius than the soda fountain. It is practical, it is simple, and it serves a useful purpose. When hot weather comes, the normal physiologic instinct is to drink more freely than at other times. Water is, of course, the standard human beverage; but it is not always easy to get good water, and the human passion for variety craves something with a different flavor. This desire for a new taste was probably at the bottom of the earliest use of alcoholic liquors; the constitutional effects were a secondary affair. There are still those who seek to quench the increased thirst of hot weather with wine or beer. But if alcohol is a bad drink at all times, it is worse when the thermometer is highest. With their innate good-sense, therefore, the majority of the American people turned from the bar in quest of harmless and thirst-slaking drink, and the problem of their search was solved by the soda fountain.

"The soda fountain bubbles with the versatility of the American character. It contains many possibilities within its limited compass. Originally it was designed

merely to dispense aerated water flavored with various fruit extracts. The effervescence and the flavor contributed the two essential elements of a refreshing drink. Gradually, however, new elements were added. The same American genius which had shown itself in the invention of the cocktail, found in the domain of temperance drinks a new field for ingenuity; new mixtures and combinations were devised, until now the nomenclature of the soda fountain is as complex as that of any science. In the first place, there still remains the fundamental category of plain sodas; then there are all these plus ice-cream or plus phosphates, or plus an egg or plus any two or three ingredients. The addition of the egg was an important step, for that introduced the element of nutrition. Many a hustling American business man, who would formerly have gulped a whisky raw, followed by a chaser, or would have gone empty, now drinks his egg phosphate, and returns to his business refreshed and to his home good tempered. The soda fountain has helped the morals and the health of the American people.

"There are numerous other mixtures with strange names and unfathomed composition—the sundaes and the fizzes and the freezes and so on. Most delectable perhaps is the lime freeze, made of lime-juice, mint, ice, and soda water, a perfect substitute for the pernicious and seductive mint-julep. It is in the preparation of these mixed drinks that one sees the soda fountain at its best. The decorative stand, the mysterious compartments—from which fluid flows on the pressure of a knob, as Faust's wine flowed from the table—the tinkle of glasses, the cool clink of ice, the fizz of the soda, have all the fascination of a fully equipped bar; and the attendant, in white duck coat and apron, tossing a dash of phosphate into your drink and then shaking the whole to a foaming mixture, assumes all the friendliness of the bartender without any of the latter's diabolic possibilities.

"The soda fountain has few objectionable qualities, and these are far outweighed by its merits. It is clean, it is wholesome, it is attractive. It combines cheapness and convenience with beauty in its ministration to human thirst. It is perennial, for it can dispense a whole new category of hot drinks in winter. It is a great civilizing agent, a triumphant manifestation of clear-headed, practical American genius."

"KOKO CREME"—A 'POPULAR SODA-FOUNTAIN SYRUP.

During an experience of twenty years operating a soda fountain in connection with a retail drug store in a small town, Charles R. Rhodes has tried numerous syrup formulas under fanciful names. But all have been discarded except one, Koko Creme, which has grown steadily in popular favor since its introduction eighteen years ago.

Believing that a flavor which has proved palatable to many of his patrons for such a long period might be profitably used by pharmacists in other localities. Mr. Rhodes submitted the formula at the last meeting of the Pennsylvania Pharmaceutical Association.

For a glass of soda water, mix a sufficient quantity,

about 1½ ounces of equal parts of chocolate and vanilla syrups, and add one-half ounce of pure cream.

In dispensing, be careful to have the flavoring ingredients thoroughly mixed with the carbonated water and serve with a foam.

The syrups are prepared as follows:

Chocolate—

Powdered chocolate.....	8 ounces.
Granulated sugar.....	8 pounds.
Shredded gelatin.....	½ ounce.
Water	5 pints.

Dissolve the gelatin in the water cold, heat to the boiling point, then add seven pounds of sugar and stir until dissolved.

To this solution add the powdered chocolate, which has been slightly triturated with the remainder of the sugar, boil for ten minutes, stirring constantly with a wooden spoon or paddle.

If necessary, add sufficient water previously boiled to make the finished product measure ten pints and then pass it through a wire milk strainer. Chocolate syrup prepared by this process meets all the requirements for soda fountain use. It is smooth, of proper density, and will not readily ferment. It should be kept in tightly stoppered quart or half-gallon bottles and thoroughly shaken when dispensed.

The vanilla syrup is prepared by dissolving one-half ounce shredded gelatin in one-half gallon of water, cold. Heat to the boiling point, add seven pounds of granulated sugar, dissolve, add sufficient water to make one gallon and strain. When cold add four ounces of vanilla extract.

The chocolate and vanilla syrups thus prepared can be used when these flavors are called for separately and need only be mixed when koko creme is requested. The gelatin is an excellent foam producer, free from the objectionable properties of soap-bark preparations for similar use.

When these syrups are combined as directed to make koko creme, the result is a wholesome delicious beverage that tastes similar to the old time chocolate drop. The drink can be sold profitably at five cents a glass and will doubtless prove a winner at any soda fountain where it receives a fair trial.

SELECTED FORMULAS.

PEACH PUFF.

Into an attractive bonbon dish put a ladleful of crushed peaches. Fill in with half vanilla cream and half peach cream. Top with whipped cream, over which sprinkle some dry English walnuts. On the crest put two maraschino cherries.

CHOCOLADA.

Put into a 12-ounce mixing glass one-fourth full of cracked ice, 2 ounces of chocolate syrup and 1 ladleful of marshmallow dressing. Then fill the glass with good, rich milk, shake, strain into a 12-ounce glass and add one 20-to-the-quart disherful of ice cream (chocolate or vanilla) on top. Serve as an egg drink. Sells for 20 cents.

PINEAPPLE BLEND.

A contributor sends the following formula with the statement that during the winter she finds that soft drinks made without carbonated water sell the faster

and are liked better by the people; mix well together and place on ice 1 ounce of pineapple extract, 1 ounce of orange, 1 ounce of tartaric acid solution (8 ounces of tartaric acid to 1 pint of water), 1 quart of simple syrup (10 pounds to 1 gallon of water), ¼ ounce of yellow color and 2 quarts of clear water. Serve in 8-ounce glasses. At 5 cents per glass it yields a good profit.

FROZEN ORANGE BASKETS.

Cut an orange into the shape of a basket with a handle. Cut out the inside of the orange, leaving a little of the juice. Then fill the basket with ice cream and top off with a cherry, or two. The baskets can be made and frozen as wanted, or they may be made to order; they should not be frozen too hard. Slice off a little from the bottom so that the basket will stand upright.

FRUITADE.

Squeeze the juice of half an orange into a mixing glass and add 1 ounce of orange syrup, 1 ounce of cherry syrup, cracked ice, and a dash of solution of acid phosphate. Fill the glass with carbonated water, mix well and strain into a 10-ounce glass; top off with cracked ice and a maraschino cherry. Sells for 5 cents. Instead of using cracked ice and cherry syrup one can employ one 16-to-the-quart dipperful of orange ice on top and dispense the mixture as "orange float."

SWEET ENJOYMENT.

To one pint of pineapple syrup, add eight ounces of vanilla syrup, eight ounces of raspberry syrup, and twelve ounces of strawberry syrup, and mix thoroughly. To serve, draw one and one-half ounces into a twelve-ounce glass, add one ounce of sweet cream, and fill with carbonated water.

BANANA CREAM SHAKE.

Into a mixing glass draw one and one-half ounces of fresh banana syrup (simple syrup or peach syrup may be used), into this slice one-half a banana in very thin slices. Add a portion of ice cream and fill with milk and shake. Pour without straining into a twelve-ounce glass and serve with a spoon. This may be topped with whipped cream.

A BRIEF SODA AD.

"Sherwood's Drug Bulletin," a store paper published in Cleveland, had a little announcement of its soda fountain that invited patronage. It reads as follows:

The Soda Fountain.

The Soda Fountain continues to sizzle as if it were mid-summer. The appetizing morsels and toothsome dainties as prepared by our skilled dispensers are much appreciated, as evidenced by the increased patronage we are enjoying.

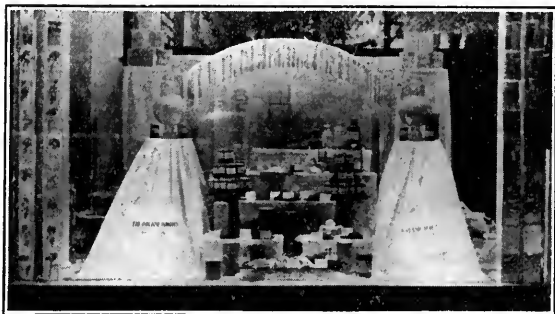
The Nutritious Malted Egg Drinks as we prepare them are steadily growing in popularity. Healthful and appetizing as they are, there is little wonder. All our syrups are made from pure granulated sugar and flavored with crushed fruit. They are pure and wholesome. Every drop of our soda water is filtered—you can drink it freely because it's clean.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

This Helped the Prescription Department.—

Schlitz Bros., of Appleton, Wis., recently arranged a display of drugs and chemicals in the window. It did



more to develop the business of the prescription department than any other plan they ever tried.

On the left was a sign:

YOUR DOCTOR KNOWS
Your individual requirements. Bring his prescription here. It will be filled right.

Another sign on the right read:

MEDICINES
No medicine can be good unless the ingredients are of full strength. That's the kind you get here.

In the center of the trim was an assortment of chemicals and a few samples of drugs. A scale, a graduate, mortar and pestle completed a display of a strictly pharmaceutical nature.

An Excellent Prescription Ad.—

We are reproducing herewith an excellent enclosure for prescriptions. It is used by Messrs. Wilkinson & Co., prescription druggists, of Keokuk, Ia. No discus-

Dear Friend:

To be chosen to compound your prescription—to be shown in this way of your respect and regard for our professional ability—appeals to us.

In the careful way we have compounded this prescription we have endeavored to convey back to you our thanks for your confidence.

We have used the very purest drugs and followed every detail of the order implicitly.

Should our efforts be of service in helping you back to health we shall deem ourselves doubly fortunate.

Yours very truly,

WILKINSON & CO.

Prescription Druggists.

422 Main Street,
Keokuk, Iowa.

sion is necessary. The enclosure is 3½ by 4 inches in dimensions and must impress the recipient with the care with which the prescription has been compounded.

An Unusual Store Paper.—

A somewhat novel store paper is distributed by the Key West Drug Co., of Key West, Florida. It is entitled the "Key West Booster," and is printed partly in English and partly in Spanish. Aside from several articles of local interest are a liberal supply of jokes. We reproduce one of the ads:

KEY WEST DRUG CO.

DRUGS--That's our business--You can accuse us of "Tooting our own horn" if you want to but we are proud of the record we have made in this line of business.

Since the organization of this business 9 years ago it has been the sole intention of the management to give to Key West a store second to none in the state. No stone has been left unturned. No expense has been spared to carry out these intentions, and today we are operating two stores, and they are both winners, because we stuck to the drug business--we are not through yet.

Some "Knocker" may say we are "Greedy" if we ask for more business, but we ask YOU for YOUR business. Operating the class of stores we do we feel entitled to portion of your business and we don't hesitate to ask for it.

If it's in the DRUG line--we have it.

Two Stores--Both Good

Two Phones--Both Working

KEY WEST DRUG CO.

THE REXALL STORES.

Phones 40 and 49. Stores, Simonton and Fleming, and 123 Duval Sts.

A whole page was devoted to this appeal for business.

Politics in Pharmacy.—

Politicians have given A. J. Strathie of Doylestown, Pa., a cue for a very readable ad. It occupies only about two inches in the newspaper, but has at-

We believe in
"INITIATIVE"
"REFERENDUM"
and **"RECALL"**

You take the "INITIATIVE" and visit our store and we will do our utmost to give you satisfaction.

We "REFER" our goods to you for your approval.

All your CALLS at our store are subject to "RECALL."

Summed up—

"It's a pleasure for us to please you."

HULSHIZER'S PHARMACY,

Main and State Sts., - Doylestown, Pa.

tracted no little attention. It seems Mr. Strathie hit upon the idea one day while talking politics with a lawyer in his town.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

The Unseen and Unknown.—

D. Berthelot says there are four classes of ultra-violet light-rays. The longest are those from the sun, which do not destroy germs directly but have a chemical action. Medium and extreme ultraviolet rays, which are produced by arc lamps, are germicidal and also induce chemical actions, and these two differ chiefly in the nature of the chemical changes which they induce. Finally there are "unknown" and very short rays which are so readily absorbed that they have escaped study thus far.

Tincture of Gentian.—

The natural emulsion of gentian root is stated by Bourquelot and Bridel to be insoluble in alcohol, yet to cause hydrolysis of the gentiopicroin by simple contact in 90-per-cent alcohol. The emulsion itself is soluble in 50-per-cent alcohol and in lower strengths, but its activity is not prevented by 90-per-cent alcohol, although it is insoluble therein. Hence a truly stable tincture of gentian, which contains the full amount of gentiopicroin, can only be obtained by treating the drug with boiling alcohol.

Results vs. Froth.—

German chemists have found that the best cleansing results from soaps come from a tallow soap. Next in order come soaps made with liquid vegetable oils, then come coconut and palm oil soaps, and last are rosin soaps. The strength of the soap solution has a great influence also, the best results being obtained with a solution containing from 0.2 to 0.4 per cent of soap.

The Measure of a Poison.—

J. Traube says that poisons change the surface tension of colloidal solutions very markedly, and argues



THE AUGUST MEETING OF THE A. PH. A.—Here we have a view of "Yankee Doodle Lake," which is to be seen on the railroad trip mentioned in connection with the other cut on this page. The water is of unfathomable depth, emerald-green in color, and 10,000 feet above the sea level. All about it is a vesture of beautiful snow even in the warm summer weather.

that because of such changes, which in turn induce other changes, the action of poisons is physical and not chemical, and that the greater the change of physical condition which the poison produces, the greater is its toxicity. For instance, corrosive sublimate shows a change in surface tension in 1 part in 3,000,000, while potassium iodide shows it in 1 part in 400,000.

Rational Therapeutics.—

The condition of the body materially modifies the action of drugs, according to W. Salant. Starvation increases the toxic action of cocaine, strychnine, and phenol, but decreases that of phosphorus. Alcoholism makes the body more susceptible to atropine and lead, and decreases the elimination of caffeine. Fatigue often increases the susceptibility to poisons, and fevers modify the action of drugs, perhaps through the increased temperature. Hence the action of a drug in health only suggests what its action in disease may be.

Another Theory Knocked.—

Two German chemists claim that in chemical reactions of the metals there are split off negatively-charged electrons, which in many cases escape and contradict the theory of the indestructibility of matter. In such case stoichiometrical calculations are not accurate, since fragments of atoms escape and are lost.

How to Walk.—

J. Amar says that the consumption of oxygen in excess of that in quiet represents the energy required in walking, and from this he figures that the most economical expenditure of energy occurs when a man walks at the rate of about three miles per hour, and takes 80 to 150 steps per minute.

Electromulsions.—

A German chemist says that oil emulsions owe their stability, in part at least, to electrical repulsion of the minute oil particles which prevents their coalescing. The addition of an electrolyte, or the passing through the emulsion of a current of electricity, neutralizes this repulsive action and destroys the emulsion.



THE AUGUST MEETING OF THE A. PH. A.—Denver is to be the place, and the convention promises to be one of unusual interest. Among other things a trip will be arranged to the "Summit of the Continental Divide," the highest point reached by a standard gauge railroad in America. The train is here shown with some of the passengers looking at the ice-covered peaks all about them.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Nickel-plating Brass Lamps.

E. B. K. wants to know the process for nickel-plating the brass trimmings and lamps on automobiles permanently.

Brass or copper is sometimes brightened before entering to the plating bath by dipping it momentarily in nitric acid diluted with about 20 parts of water, and quickly rinsing it in running water. It should be placed in circuit immediately after this.

The hand must not come into contact with any part of the work after removal from the alkali, as the slightest touch may spoil all.

On removal of the plated work from the plating bath it should be quickly rinsed, without handling, in cold water, then transferred to hot water, which will cause it when taken out to dry quickly and perfectly. If the finished work is to present a smooth polishing surface, it must present such a surface before entering the plating bath. Nickel is hard and will not readily submit to a burnishing tool.

When the work is placed in circuit in the plating bath (and it should not be permitted to remain many moments in the bath without being placed in circuit) it should be moved about to free it from bubbles.

The process of nickel-plating is a simple one, and by a little practice and proper attention to the requirements, the bath may be worked month after month, and the metal deposited smoothly and with certainty.

FORMULA.

Double sulphate of nickel and ammonium 5 to 8 parts.
Water 100 parts.

Dissolve the nickel double salt in above quantity of water with the aid of heat. Cautiously add ammonia or the ammonium sulphate, until the solution is neutral to test paper. This solution should be maintained as nearly neutral as possible in use. This is commonly known in the United States as the Adams solution. It is in very general use by nickel-platers throughout the United States, and yields, where properly managed, excellent results.

For a description of the battery used and for several other processes, consult the *Scientific American Cyclopedia*, published by Munn & Co., New York.

A Percentage Problem.

B. P. submits the following queries: "How much iodine is there in one grain of potassium iodide; also in one drachm of syrup of ferrous iodide?"

According to the *Pharmacopœia* the molecular weight of potassium iodide equals 164.76, obtained by adding the atomic weight of potassium, 38.86, to that of iodine, 125.9. Since one atom of potassium unites with one atom of iodine to make a molecule of potas-

sium iodide, it follows that the iodine content of this salt is 125.9 divided by 164.76. This fraction of a grain represents the amount of iodine in one grain of potassium iodide.

In the second problem we proceed as we did in the first, dividing in this instance twice the atomic weight of iodine by the molecular weight of ferrous iodide and multiplying the result by the number of grains of ferrous iodide in one drachm of the syrup. The molecular weight of FeI_2 equals 307.3, obtained by adding together 55.5, the atomic weight of iron, and 251.8, twice the atomic weight of iodine.

The specific gravity of syrup of ferrous iodide is 1.349. This multiplied by 56 gives 75.544 grains. Since the syrupy liquid contains about 5 per cent by weight of ferrous iodide we multiply 75.544 by .05 and obtain 3.7772, which multiplied by the fraction (251.8 divided by 307.3) equals 3.905 grains, the answer.

Wart Paint.

E. L. writes: "You will do me a great favor by sending formulas for a colorless wart remover. I have a few myself, but it occurs to me that you may know some well-tried recipes. Do you think I could improve upon a 50-per-cent solution of acetic acid with a small percentage of formaldehyde? Is there anything that could be used to disguise the odor of the acid?"

The following formulas are borrowed from a very reliable work, but it is a question whether they are colorless:

- (1) Carbolic acid 1 drachm.
Glacial acetic acid 3 drachms.
- (2) Chloral hydrate 1 ounce.
Glacial acetic acid 1 ounce.
Salicylic acid 4 ounces.
Alcohol 4 ounces.
Flexible collodion 8 ounces.

The *Pharmaceutical Era* recently published the following formulas for a wart paint and a wart remover respectively:

- (1) Resorcin 150 grains.
Salicylic acid 150 grains.
Lactic acid 150 grains.
Flexible collodion 900 grains.
Ether 300 grains.
- (2) Compound tincture of lavender... 2 fluidrachms.
Glacial acetic acid, enough to make 4 fluidounces.

It would be hard to tell whether these preparations are better than a 50-per-cent solution of acetic acid with a small amount of formaldehyde, without actually trying them on the warts. As for disguising the odor of acetic acid, oil of lavender may prove satisfactory.

Casein Massage Cream.

G. P.—According to the *American Druggist* the following is an excellent formula for massage cream:

- Casein, freshly precipitated 3 ounces.
Boric acid 4 drachms.
Cacao butter 3 drachms.
Oil of muguet 10 drops.

Mix the boric acid with the casein, add the cacao butter previously softened by warming, and incorporate the materials by trituration into a smooth cream, adding the perfume last.

Oil of muguet is the commercial name for synthetic "oil of lilac;" it gives a very fragrant and delicate odor to toilet creams. Positive directions for success-

fully making a casein massage cream can hardly be given, for much depends upon the casein itself, the amount of water it may contain, and the skill of the operator. However, the above formula may be used as a basis for experimentation, modifying it by the substitution of a small amount of lanolin for an equal amount of cacao butter and adding a few drops of a solution of carmine if a flesh tint is desired. If the dried casein of commerce is used this should be softened by warming it with sufficient water, to which a little glycerin may be added. The addition of a small amount of borax also aids in softening dry casein.

For other formulas, consult the annual indexes in the December issues of the BULLETIN.

Flexible Varnish.

C. J. H. wants help. He says: "I am after a pliable varnish, something that is not affected by alcohol or water and dries quickly. I have tried to make all kinds of solutions of gutta-percha and caoutchouc, using everything possible in the way of solvents, with unsatisfactory results."

Here are several formulas for flexible varnish taken from the literature. Be careful in handling inflammable solvents.

1. India-rubber cut small, $1\frac{1}{2}$ ounces; 20 fluidounces chloroform, ether, or carbon bisulphide. Digest without heat until the solution is complete.

2. This is of the same composition as the foregoing. Only substitute gutta-percha for india-rubber.

3. Linseed oil, 1 gallon; 3 ounces each crude zinc sulphate and lead acetate; 8 ounces litharge. Boil with constant agitation until it strings well, then cool slowly and decant the cool portion. If too thick, thin with quick-drying linseed oil. Use great caution in preparing all varnishes which require the use of such inflammable materials as carbon bisulphide.

4. Pure india-rubber in shavings, 1 ounce; mineral naphtha, 2 pounds. Digest at a gentle heat in a close vessel till dissolved, and strain.

5. India-rubber, 1 ounce; drying oil, 1 quart; dissolve by little heat as possible, employing constant stirring, then strain.

6. Linseed oil, 1 gallon; dried white coppers and sugar of lead, of each 3 ounces; litharge, 8 ounces. Boil with constant agitation till it strings well, then cool slowly and decant the clear. If too thick, thin it with quick-drying linseed oil. These varnishes are used for balloons, gas-bags, etc.

Iodo-tannic Acid.

N. Z. writes: Can the following prescription be dispensed as a clear solution containing the iodine equivalent of 2 grains in each fluidrachm? If not, what addition is required? As the formula stands I can only get a dark-colored solution containing free iodine and am unable to get any chemical reaction between the two ingredients. The formula reads:

Iodine	37½ grains.
Tannic acid	60 grains.
Alcohol	1 fluidounce.
Syrup enough to make.....	2 ounces.

Heat the iodine and the acid with the alcohol and $1\frac{1}{2}$ ounces of syrup below boiling point for about twenty minutes, or until free iodine is no longer given off. Then add the remainder of the syrup and flavor as desired.

This preparation is similar to iodo-tannic acid of the French Codex. Suppose you consult that French work. In the French preparation as given in the Codex, there is twice as much tannic acid as iodine. This leads us to believe that you should use 15 grains more of tannic acid. The French authorities, by the way, do not boil the mixture but digest it at 60° centigrade, agitating from time to time.

To Protect Trees from Climbing Insects.

A. R.—Any combination of cheap greases with tar, pitch, rosin or ozokerite, which will remain sticky when cold, and not melt too easily, may be smeared around



A DRUG STORE UNDER WATER.—During the recent floods in the South, the town of Hickman, Ky., was especially unfortunate, as readers of the newspapers will recall. We are presenting a picture of the store of the Hickman Drug Co., taken at a time when the main floor was 18 inches under water. Incidentally it is interesting to know that this is the very store which Mark Twain told about in his "Life on the Mississippi." The motor boat outside of the door apparently shows how customers reached the store during the flood.

the trunks of trees to prevent insects from crawling up them. The following combinations are suggestive, and may be modified to suit. Any combination which is soft or sticky at 40°, and will not run at 130°, can be used:

- 1.—Pitch, 12 parts; rosin, 10 parts; rosin oil, 2 parts.
- 2.—Tallow, 7 parts; palm oil, 5 parts.
- 3.—Ozokerite, 15 parts; petroleum, 3 to 6 parts.
- 4.—Rosin, 4 parts; linseed oil, 1 part; molasses, 1 part. Boil together.
- 5.—Rosin, 12 parts; rosin oil, 12 parts; soda lye, 1 part. Boil together.
- 6.—Tar, 10 parts; rosin, 5 parts; palm oil, 8 parts.

A Paint for Oilcloth.

H. L. S. writes: "Could you tell me of a paint that can be used for lettering on white oilcloth? I want the following colors: brown, yellow, cardinal, red, black, and white. It must not come off when cleaned with a wet rag."

Go to a paint shop and obtain any kind of tint or color as long as it is cut in Japan. If a gloss is desired, varnish after the paint has dried. On linoleum, the paint will probably be flat. But this defect can be corrected by applying a floor varnish of good quality.

Strontium Citrate Precipitated.

W. P. M. received a prescription:

Strontium bromide	1 ounce.
Potassium citrate	2 drachms.
Chloral hydrate	2 drachms.
Peppermint water, q. s. ad.....	4 ounces.

"Upon compounding this prescription, a thick white precipitate formed," adds our querist, "which I cannot account for. I had difficulty in filling the bottle, as the mixture would hardly flow. Kindly criticize the prescription."

We have commented on mixtures of this character before in our department of "Queries." The trouble is due to the formation of strontium citrate which is thrown down as a precipitate.

Fly-bane for Cattle.

H. L. M. wants a formula for a fly-chaser to be sprayed on horses and cattle during the warm weather. One of our correspondents has found the following formula an excellent one to keep flies off cattle:

Oil of pennyroyal.....	4 drachms.
Oil of lavender.....	2 drachms.
Carbolic acid	1 drachm.
Fish oil enough to make.....	1 pint.

A spray of one-per-cent solution of compound cresol solution U. S. P. should also be efficient.

An Incompatible Prescription.

U. D. Co. submits the following prescription:

Sodium salicylate	3 drachms.
Quinine sulphate	1 drachm.
Sulphuric acid (dil.).....	2 drachms.
Simple elixir, enough to make....	3 fluidounces.

Mix and make solution.

Our correspondent wants to know how this prescription should be filled to make a clear solution.

Soluble salicylates with solutions of quinine sulphate give a white, curdy precipitate of quinine salicylate which is nearly insoluble in water. Sodium salicylate with a dilute solution (1:1000) of quinine sulphate gives a crystalline precipitate in a few days. Suppose you consult the doctor who wrote this prescription. Induce him to leave out the sulphuric acid and replace the quinine sulphate with quinine hydrochloride. This will probably yield a clear solution.

Paste Dressing for Russet Shoes.

C. M. W.—We do not know the composition of the proprietary tan shoe polish which you mention. The paste dressings used on russet leather consist of mixtures of wax with oil and other vehicles which give a mixture of proper working quality.

A simple formula is:

Yellow wax.....	9 parts.
Oil of turpentine.....	20 parts.
Soap	1 part.
Boiling water.....	20 parts.

Dissolve the wax in the turpentine on a water-bath and the soap in the water, and stir the two liquids together until the mixture becomes sufficiently cold to remain homogeneous.

Another dressing for tan shoes consists of:

Beeswax	1 part.
Oil of turpentine.....	4 parts.

Spray for Catarrh.

C. E. W. wants a catarrh spray containing carbolic acid.

The following formula is found in the literature:

Carbolic acid	10 minims.
Glycerin	2 drachms.
Vaseline	2 ounces.

Warm, and use as a spray every four hours.

A Film Cement.

Iron-ton.—The following formula for film cement was given us by an experienced photographer:

Ether	2 ounces.
Acetone	4 ounces.

Take a strip of non-inflammable film about 8 inches long, cut it up into small pieces, and dissolve them in the solution.

This, we are told, is a very good cement for the reason that it works quickly.

To Frost Windows.

B. J. O. writes: "Please publish a formula for frosting windows with Epsom salts."

A process is given in "350 Dollar Ideas for Drug-gists," on page 175. Moisten the glass with a sponge dipped in a saturated solution of Epsom salt in stale beer, and allow it to dry in the air.

To Polish Celluloid.

P. B. D. wants a formula of a polish for celluloid. Make a kind of putty of hot soap, free from rosin, in which equal parts of fine pumice stone and flour emery have been mixed.

M. E. B.—We do not know a formula for the proprietary mixture which you describe.

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THE MONTH'S HISTORY

THE RICHARDSON AND OTHER BILLS. Nobody knows yet what Congress may do at this session with reference to the Richardson bill and the half dozen or so other measures designed to amend the food and drugs act in different ways. A series of hearings on these different bills was held some time ago by the House Committee on Interstate Commerce, and the different branches of and associations in the drug trade were represented. The Legislative Committees of the N. A. R. D. and the A. Ph. A. had a conference in Washington at the time, and agreement was reached upon certain modifications of the Richardson measure. One or two representatives of the jobbing trade were also present, but they were not in accord with some of the positions taken and apparently did not vote.

The N. A. R. D. and A. Ph. A. Committees were afterwards represented at the hearing by Frank H. Freericks, attorney for the N. A. R. D. The position of the jobbing trade was set forth by F. E. Holliday. Charles M. Woodruff, in his capacity as secretary, spoke for the newly-organized Association of Manufacturers of Medicinal Products. The Proprietary Association was represented by Harry B. Thompson and George L. Douglas. Dr. Lyman F. Kebler spoke at some length and it turned out that he was the real author of the Richardson bill as it was at first drawn up. At the first day's hearing he submitted a number of further changes in the draft, among which was one striking out the so-called variation clause. Dr. H. W. Wiley and other individuals were also heard.

Hundreds of sheets of typewritten notes, and pages upon pages in different journals, have since been required to set forth what all these men had to say. They were not at all in agreement with one another, and in the last analysis it will be left for the House Committee to arrive at its own conclusions. The chairman of the committee, Congressman Adamson, is understood to be against the passage of any food and drug legislation at this session of Congress, and it looks more and more as if nothing would be done until the next session. If any amending bill be passed, however, it will probably not be the Richardson measure at all, but the Sherley bill. The latter is very brief, simple, and direct, and merely provides that a drug shall be deemed to be misbranded "if the package or label should bear any statement regarding the curative or therapeutic effect of such drug that is false and fraudulent."

This was the original purpose of the Richardson bill, but the framers evidently thought that while they were about it they might as well do a lot of other things, and they loaded up the measure with so much stuff that no two people have been able to agree on it.

**THE "VARIATION
CLAUSE" AGAIN.**

All this agitation for the amendment of the food and drugs act, it will be remembered, was provoked by the decision in the now famous Johnson cancer cure case. The court held against the government and with the defense that curative claims, whether exaggerated or not, were not reached by the food and drugs act, and since then there has been a very general desire so to amend the act if possible that the omission will be corrected. President Taft sent a short message to Congress pointing out the desirability of action, and the Sherley bill, the Richardson bill, and half a dozen other measures are the result. The Sherley bill hits the nail squarely on the head and will do all that can possibly be done. Congressional sentiment seems to be crystallizing in its favor. The Richardson bill drags in a lot of extraneous issues upon which there is no agreement as yet, and we shall be very much surprised if it is adopted by Congress.

Take, for instance, all the discussion about the variation clause. This received perhaps more attention at the recent congressional hearings than any other feature of the Richardson bill. Dr. Kebler started it all by urging at the hearing on the first day that the variation clause contained in the Richardson bill as it was introduced into Congress be stricken out. Subsequently the N. A. R. D. and A. Ph. A. Committees, in their conference in Washington, voted in favor of supporting Dr. Kebler on this proposition, and Mr. Freericks accordingly urged before the House Committee that the clause be dropped and that the "single standard" for U. S. P. and N. F. products be observed.

We expressed our opinion about this question editorially last month, and we do not need to go all over the ground again. The variation clause has always been contained in the food and drugs act, and it is now proposed by Kebler, Freericks and others to drop it. What will happen if it is dropped? Simply this—there can be no possible improvement in U. S. P. and N. F. products for ten years or more until new editions of these books are published! Everybody will have to travel in the same old rut, use the same old method, and hold back all progress until the word comes to go ahead! Furthermore, there are many able lawyers who declare that if the variation clause of the food

and drugs act is stricken out the law will be rendered unconstitutional. Why? Because you can interfere with the freedom of trade, and the rights of individuals, just so far and no farther. A man must be permitted to buy what he wants to buy, and to make and sell what he wants to make and sell, unless, of course, he is interfering with the public health or the public welfare or the rights of other individuals.

* * *

**GOVERNMENT
CONFISCATION.**

Another strong argument against the abandonment of the variation clause was made by Mr. Holliday at the recent hearings. He spoke of a certain proprietary essence of pepsin. This product had become very popular and well known before a formula for a similar preparation appeared in the N. F. The N. F. publishers printed a competing formula and borrowed the title which the manufacturer had always used, namely, "Essence of Pepsin." Now suppose Congress ties things up so that there can be no variation in N. F. products, and no preparation can therefore be sold under the title of "Essence of Pepsin" unless it is made absolutely after the N. F. formula and process. The original manufacturer, then, will either have to abandon the process which he has always used, and on which he has built up his reputation, or else he will have to call his preparation by some other name. In other words, either his process or his title will be taken away from him. That which he has built up the government has therefore robbed him of. This is plain confiscation, isn't it—taking a man's property away from him without due process of law? Does anybody argue that a statute which permits this sort of thing is constitutional?

This point has come up in one way and another on several occasions since the passage of the food and drugs act. There are dozens of products in the National Formulary which are in exactly the same category, and there are perhaps a few in the Pharmacopœia as well. If therefore the variation clause is abandoned, and manufacturers of the original products are accordingly made either to change their titles or to conform to the official formula, an injury will be done to them which may be corrected by an appeal to the courts. We shall certainly have a nice mess!

**A NEEDED
REFORM.**

Mr. Miers Busch, of the well-known jobbing house of Shoemaker & Busch in Philadelphia, has been for some time carrying on a propaganda to induce the newspapers of the country to cut out all reference to specific poisons and their doses in publishing reports of suicides. Last October, for instance, the National Wholesale Druggists' Association passed the following resolution and recommended it for adoption by associations generally:

Whereas, the publication by the daily newspapers of the names of the poisons used in cases of suicide or homicide, together with information concerning such poisons and the amount constituting a fatal dose, has the tendency to suggest their use to criminals and persons of suicidal intent;

Therefore be it resolved, that we recommend that the members of the National Wholesale Druggists' Association request the proprietors of newspapers in their vicinity to omit in future the publication of these details.

Practically the same resolution has also been adopted by six or eight State pharmaceutical associations, a number of local bodies, and several medical societies. Mr. Busch has this year called upon every State pharmaceutical association in the country to take action if it has not already done so. In the meantime the newspapers of Mr. Busch's own city have promised to conform to his request, while Melville E. Stone, general manager of the Associated Press, has expressed himself in full sympathy with the idea and has said that he would do what he could to bring all of his thousands of correspondents into line.

The simple fact is, as everybody knows, that suicides are contagious. Let the newspapers publish stories to-day about some prominent suicide, and to-morrow there will be half a dozen other stories to report in different parts of the country. This is particularly true when the reports give the name of the poison used, and the dose employed. If these facts are omitted, most of the harm done by such publicity is avoided.

* * *

**DR. WILEY'S
SUCCESSOR.**

Nothing has been done yet in the selection of a successor to Dr. H. W. Wiley. President Taft has been compelled to take the field in defense of his administration, and his time and his thought have been so wholly occupied that he has doubtless paid little atten-

tion to appointments. Nothing indeed may be done for some time, inasmuch as the work of the Bureau of Chemistry is apparently running along pretty well under the temporary direction of Dr. Doolittle. In the meantime, however, the drug trade is taking up the candidacy of Dr. James H. Beal with a great deal of enthusiasm. Resolutions in his favor have been adopted by a number of organizations like the Philadelphia Association of Retail Druggists, the Chicago Retail Druggists' Association, the Hyde Park druggists in Chicago, the Western Pennsylvania Retail Druggists' Association, the Pittsburg Branch of the A. Ph. A., the New York College of Pharmacy, and many others. The State associations will begin to hold their annual conventions before long, and they will doubtless fall in line with the general movement. Meanwhile a delegation of prominent members of the drug trade, especially from Dr. Beal's own State of Ohio, have called on President Taft in person to urge Dr. Beal's appointment. Dr. Beal himself, however, is not lifting a finger in his own behalf, and is leaving both the initiation and development of the movement entirely to his friends.

* * *

**MONOHIPPIC
DRUG JOURNALS.**

Our friend Schneider, editor of the *Pacific Pharmacist* out in 'Frisco, is a warm and enthusiastic advocate of Dr. Wiley. He is a little bit peeved that some of the drug journals have on divers occasions attacked his champion, and he gives a list of these offenders in an editorial published in the April issue. Of course the BULLETIN OF PHARMACY is not in this list—that isn't the reason we are mentioning the circumstance. What interests just now is the term which Dr. Schneider applies to these papers who have offended against his sense of decency. He calls them "monohippic" journals. Pretty good word, isn't it? Monohippic! "Mono" is of course "one," but we do not suppose this word means one-hipped, or hip-sided, or lop-sided. Neither is it likely to mean that these journals are "hipped" on themselves. Confound it, what does the term mean anyway? We are curious to know what compliment is being paid to some of our editorial friends. Can it be that Dr. Schneider is a Greek scholar, and that he has coined a phrase meant to suggest that some of the drug papers are one-horse journals? With this fear

in mind, we resist the temptation to reprint his list of monohippic monstrosities.

* * *

**DR. RUSBY
CONTEMPLATING
A CHANGE?**

One of the interesting rumors of the day has it that Dr. H. H. Rusby will soon retire from some of his several positions in order to establish a pharmacognostical laboratory in connection with the business of Dr. George A. Ferguson. Dr. Ferguson was formerly a professor in the New York College of Pharmacy, and since retiring from the faculty has become an analytical and consulting chemist. It is supposed that Dr. Rusby will give up the deanship of the New York College, but will retain his position on the faculty. It is expected, too, that he will abandon his work as pharmacognosist for the government at the port of New York. He has several other irons in the fire also, and in fact is one of the busiest men it has ever been our fortune to know. His ability and his reputation are such that it would seem most wise for him to capitalize them in a private business of his own, and there is no doubt that such a change as he contemplates would greatly increase his income.

* * *

**ADVERTISING
A MEETING.**

An ingenious advertising plan has been carried out this year in behalf of the annual meeting of the Tennessee Pharmaceutical Association. The convention is to be held in Chattanooga on July 9, 10, and 11. Chattanooga is a place of such remarkable historical interest that it lends itself very nicely to purposes of publicity. W. I. Gates, Chairman of the Publicity Committee, has taken a series of souvenir post-cards, bearing different Chattanooga views, historical and otherwise, and then printed on the front of them short announcements of the forthcoming meeting. The particular announcement on each card is different, and the "follow up" method has apparently been used in mailing the series. By the time a druggist has received the third or fourth card he has become pretty thoroughly interested in the meeting, and has developed a desire to see some of the places which have been brought to his attention. The scheme strikes us as a pretty good one and worthy of adoption by other associations.

**THE
SACCHARIN
RULING.**

There has been some misunderstanding among druggists regarding the Federal regulation against the use of saccharin in foods. Some druggists have worried lest certain medicinal preparations containing saccharin would be considered illegal. In aromatic preparations of castor oil, for instance, saccharin is quite frequently employed for the reason that sugar is not soluble, and druggists in some instances have shown alarm over the presence of saccharin in products of this character. Fears of this kind are all based upon a misapprehension. *The ruling in question affects foods only and has nothing whatever to do with medicines.* Furthermore, so far as foods are concerned, the ruling has recently been somewhat modified so that now saccharin may be used in foods for invalids or semi-invalids who are advised by their physicians not to use substances which contain sugar.

* * *

**NEW BRANCH
OF THE A. PH. A.**

The latest branch of the American Pharmaceutical Association to be organized is that in St. Louis. William K. Ilhardt has been elected president, and the first regular meeting was held some time ago. On that occasion a number of interesting papers were presented, and a wide range of topics discussed. Medicinal plants, with particular reference to the Missouri Botanical Garden, occupied most of the space on the programme, but other subjects were taken up like the Richardson bill, the Pharmacopœia, board examinations, and the drug-clerk question. The Chicago branch of the A. Ph. A., by the way, has lately adopted the custom of inviting some man from outside the State to come to Chicago and deliver a special address. The first speaker in this series was John Uri Lloyd, who gave a most interesting talk concerning his travels in Eastern lands and the collection and shipment of such drugs as opium, licorice, myrrh, and the like.

* * *

**CANADIAN DRUG
REGULATIONS.**

American manufacturers of proprietary medicines whose products are marketed in Canada should take cognizance of the new regulations recently promulgated by the Board of Inland Revenue of the Dominion. The Act provides that all patent and proprietary medicines intended for internal use in man, manu-

factured or imported into Canada for sale, shall be registered with the Department at Ottawa before April 1 each year, although all preparations for external use, provided they contain no cocaine, are exempt from registration. Among other things, the new regulations require that if any preparation contains drugs in excess of the dose required, the name of the drug must be printed on the label of each individual package containing it. The presence of oils of tansy, savin, pennyroyal, etc., ergot, and other abortifacients, when present, must also be declared on the label.

* * *

INDEMNITY INSURANCE.

Here's a strange development! We have been hearing for years that druggists

in certain cities found it a wise bit of coöperation to have their associations buy indemnity insurance protecting the members against damage suits arising from mistakes in compounding and the like. Now comes along the insurance commissioner of the State of Missouri, who issues an order prohibiting the sale of indemnity insurance for druggists, doctors, dentists, and automobilists. Why? Because such insurance tends to make the insured careless. If he knows he is going to be protected anyway, he will not use that degree of caution which would otherwise be his guiding star. This is rather a fine point to take, but it would seem in the meantime as if indemnity insurance could not be purchased in the State of Missouri unless it is found that this particular commissioner, in placing the ban upon it, has exceeded his powers.

* * *

DRUGGISTS CONSOLIDATING.

It is rather interesting to know that the proprietors of three drug stores in Minne-

apolis have joined hands and formed "The Public Drug Co." with an authorized capital stock of \$250,000. Stewart Gamble is president of the corporation, F. L. Dennie vice-president, C. B. McCall secretary, Alvah W. Ludwig director, and S. H. Brownlee treasurer and general manager. Mr. Gamble is well-known as the president of the State association two or three years ago. The three stores formerly owned by these men will be maintained, and a fourth establishment will be opened at 201 Washington Avenue South. The consolidation is made for the obvious purpose

of eliminating waste and achieving economies. Doubtless other stores will be added if the conditions warrant such a step.

* * *

FRAUD HABIT CURES.

It has been discovered on more than one occasion that the products sold for the treatment of the narcotic habit themselves contain the very narcotics which they are supposed to combat! Here is a recent case in point: The "St. James Society" of New York City was prosecuted by the government for shipping what was called a "drug-habit cure." The ground of complaint was that the product was misbranded, but the interesting disclosure made by the prosecution was this, that the alleged drug-habit cure contained morphine to the extent of 3½ grains to the fluidounce!

* * *

Gustav Ramsperger, one of the original founders of the German Apothecaries' Association in New York, and a German-American of prominence, was instantly killed a few weeks ago by falling from the sixth floor window of his apartment in Central Park West. He was 88 years old.

* * *

The Water Bureau in Philadelphia has recently ruled that druggists having soda fountains must hereafter pay an extra tax of \$5.00 annually, whether or not there is a separate connection between the fountains and the city mains. The P. A. R. D. is fighting the ruling.

* * *

The Senior class of the Brooklyn College of Pharmacy has presented the college with a memorial tablet of the late Dr. William Muir, one of the founders of the institution. The tablet is made of bronze with a background of marble.

* * *

The Milwaukee convention of the N. A. R. D. this year has been changed from the week of August 26 to the week of August 12, for the reason that some other large gathering is to be in Milwaukee during the last week of the month.

* * *

A successor to Dr. H. W. Wiley has just appeared on the scene, but he will not be able to qualify for some time. He was born on the 16th of last month—Dr. Wiley, Jr.

EDITORIAL

THE RELATION OF INSURANCE TO CREDIT.

For some time we have been trying to impress upon our readers the cardinal importance of a proper degree of insurance protection. We now find in a recent issue of the *Midland Druggist* a short but most illuminating article by George W. Lattimer, chairman of the Committee on Fire Insurance of the National Wholesale Druggists' Association, and a member of the jobbing firm of the Kauffman-Lattimer Co., of Columbus, Ohio. Mr. Lattimer especially discusses in this paper the relation of insurance to credit.

He shows, for instance, that the jobber or manufacturer, in extending credit to the retailer, finds it of the utmost importance that, in addition to the retailer's commercial rating, he discover what insurance protection the man has. For what avails it if the druggist is rated at \$20,000, say, if all of this amount, as frequently happens, is invested in stock, fixtures and building, and if the whole sum is lost by a sudden fire with no insurance by way of reimbursement?

In order to show just what this means Mr. Lattimer quotes a credit man in one of the large wholesale houses in a leading city:

Of the many property statements coming under my supervision, I feel safe in stating that there is not one in fifty which shows the trade carrying sufficient fire insurance. We attach so much importance to fire insurance that we have for some years past required our customers to whom we have extended credit to report on blanks which we furnish, the amount of insurance carried and the name of the company and date of expiration. We then follow up the expiration and see that the insurance is renewed.

One of the heaviest losses sustained by us this year was the result of a customer burned out without insurance, and in looking back over our list for some years, I find that cases of this kind have been frequent.

Practically all business in the United States is done upon credit, and the accurate placing of a man's rating is one of the carefully studied commercial sciences of the day. That merchant is foolish who does not give the information requested by creditors or by commercial agencies, and who does not comply with all of the requirements of the situation. Insurance protection plays a large part in the problem of credit, and every merchant owes it to his creditors as well as to himself to see

that he buys fire insurance of the proper kind and quantity. So important is this consideration that the National Credit Men's Association, during the last two or three years, has published no fewer than six booklets on the relation of insurance to credit. And yet every day merchants are being burned out with little or no insurance, thus subjecting themselves and all their creditors to losses for which there is no excuse at all.

PROGRESS IN VACCINE THERAPY.

We are living in an age of remarkable scientific discovery. Especially in the field of applied bacteriology, great strides are being made. Some medical men even predict that the time is not far distant when many of the suppurative conditions now treated surgically will be cured in other ways. There will be serums, vaccines, or related bodies which, introduced into the circulation, will prevent the growth of pathological organisms. Operators are already using vaccines for prophylactic purposes. The field of surgery, it appears, will dwindle. But that the technique will progress, we have no doubt.

In the treatment of infections, vaccines are already supplanting the knife. Take boils, for example. Slash them open, establish drainage was the usual advice not long ago. Now the physician withdraws the content, injects a little vaccine, and the boil is healed. There is no scar, and the patient has much less discomfort. So with catarrhal inflammations, the time is probably coming when surgical intervention will no longer be necessary. Biological products will be available either to immunize susceptible people against such infections or to cure them when they actually come down with disease.

Of late we have been watching with a great deal of interest the wonderful work of Dr. A. F. Schafer, of Bakersfield, California. Dr. Schafer is the discoverer of the Phylacogen treatment of germ diseases. Rheumatism of the joints, until recently a hopeless affection that resisted nearly all forms of medical treatment, is now being cured with half a dozen or more injections of the proper Phylacogen. Rheumatism Phylacogen is already on the market, and is soon to be followed by other Schafer products.

Among these Pneumonia Phylacogen is especially promising. Hitherto this dread disease has baffled physicians. The mortality

has been high—about 40 per cent. Beyond watching the heart and insuring proper nursing, there was little a physician could do. He undertook such cases with the same fear and trepidation that marked his visit to a diphtheric patient before the advent of antitoxin. Now he may call, give an injection or two of Pneumonia Phylacogen, and the patient begins to improve at once. In a few hours the feverish temperature subsides, the blood-pressure becomes normal, and the patient is on the road to recovery. Of course, he must have strength enough to tide him over the period of convalescence. But as for the disease itself, it is said to yield to Phylacogen in something like 80 per cent of the cases. Thus far the pneumonia product has been used experimentally only, but its early manufacture has been announced.

We might go on to write a book about the wonderful work of Dr. Schafer. There are so many diseases in which the Phylacogens are indicated. But we must hasten now to an explanation of the theory of the phylacogen action. It is Dr. Schafer's belief that most pathological affections are due not to the specific germ alone, but also to the action of other organisms that may be associated with it. Dr. Schafer has found further that every germ contains the elements of its own destruction. It contains products which, extracted or removed, may be used to prevent the growth of the very organisms from which they are derived. This is not exactly a new phenomenon. There has always been a kinship between the principle of *similia similibus curantur* and certain phases of immunity. Pharmacists are well aware that when a culture of acetic acid bacilli generates 12 per cent of acetic acid, the germs die, overcome by their own secretion. In a somewhat similar way Phylacogens are destructive to the very germs from which they come. The organisms of rheumatism, typhoid, pneumonia, mixed infections of various kinds, erysipelas, acne, and other diseases succumb to an injection of the proper Phylacogen, which is nothing more or less than the elements of the very germ bodies which they are intended to combat.

What a wonderful piece of work! Dr. Schafer's Phylacogens are not serums. Nor are they vaccines. In a sense they may be called modified vaccines, and at least for the present represent the last word in biological therapeutics.

BUSINESS CARELESSNESS.

It certainly is strange how indifferent some druggists are to the most fundamental necessities of business life. In talking with a large jobber some time ago we were astonished to find how frequently it was that druggists made no attempt, for instance, to secure a good credit rating. One case in point was mentioned where a man had been slow in his payments for ten years. He kept getting worse and worse, and more and more in arrears. He had no rating with either Bradstreet or Dun, and the jobber was afraid to grant him credit any longer. Letters calling attention to arrearages were ignored. Finally, after a great deal of pressure had been brought to bear, the man paid part of his account with a check, but the check was afterwards protested when presented for payment!

Here was a druggist whose financial obligations never caused him any anxiety, who never thought of the value of cash discounts that might be earned, who usually ignored letters calling attention to arrearages, who apparently paid his bills only when dunned time and time again, and with whom it was no crime at all to issue a check knowing full well that he had not enough money on deposit to meet it.

When he was taken to task about these shortcomings, he declared that he was out of town when the protested check arrived. This evidently seemed to him sufficient excuse. If he had been there he would have taken care of it! As for the absence of any rating with Bradstreet or Dun, he loftily asserted that he never bothered with letters of inquiry from these sources. He never troubled himself to make any statement to such concerns. He added, moreover, that credit rating was only a matter of favoritism, and that he knew personally a number of people who had good ratings but who were nothing but bluffs in fact.

What are you going to do with such men in business life? Our friend, the jobber, told us that there were a surprising number of such druggists with whom every jobber and manufacturing house have to deal. They seem to have had no commercial training whatever—to possess no ideas of commercial practices and precautions. They ignore their plain obligations, and then become offended if their creditors speak rather plain language to them.

THE HALL OF FAME

DR. SCHLOTTERBECK GOES TO ROCHESTER.

The alumni of the School of Pharmacy of the University of Michigan, and all of the other numerous friends of Dr. Schlotterbeck for that matter, have been very much interested in the announcement that he has been



DR. J. O. SCHLOTTERBECK.

granted a year's leave of absence by the University in order to establish a laboratory for the J. Hungerford Smith Co. of Rochester, N. Y. Mr. Smith himself is an alumnus of the school, as is his son also, and the Smiths evidently knew from personal experience that Dr. Schlotterbeck was admirably adapted to create a new laboratory of the kind needed, to equip it properly, to get a good working staff, and to lay out the work wisely and thoroughly. In the meantime Dr. Schlotterbeck's place as dean and professor will be filled by other members of the faculty and by assistants who have received their training under him.

The esteem in which Dr. Schlotterbeck is held by the alumni was exhibited on the evening of May 23, when a testimonial dinner was given him at the Hotel Cadillac in this city. There were present about forty former students of the school, and the occasion was one of unusual enthusiasm. Dr. Schlotterbeck's character and ability were eulogized by several speakers, and a handsome gold watch was presented to the guest of honor during the course of the evening.

A PROMINENT IOWA PHARMACIST.

Theodore W. Ruete, of Dubuque, Iowa, is a druggist who has frequently been honored by the people of his own city and by his fellow workers throughout the State. He has served, for instance, as president of the Iowa State Pharmaceutical Association. He was a member of the first A. Ph. A. Committee appointed to get out the National Formulary. In Dubuque he has been a prominent citizen, and at the present time is president of Finley Hospital. Mr. Ruete was born and received his educational training in Germany, which accounts for the thoroughness of his pharmaceutical equipment. Soon after arriving in this country the Civil War broke out, and he served as apothecary and hospital steward until peace was declared, witnessing during



T. W. RUETE.

this period many of the great battles fought by the Army of the Potomac. He has been in Dubuque for thirty-eight years and has always conducted a first-class business, in which particular attention has been paid to the prescription department.

MR. RYAN GIVEN AN HONORARY DEGREE.

At the annual commencement exercises of the Philadelphia College of Pharmacy last month Frank G. Ryan, President of Parke, Davis & Co., had conferred upon him the honorary degree of Master of Pharmacy (Ph.M.). This degree has been granted very

sparingly by the College, and has always been reserved for those who have really distinguished themselves in some branch of the call-

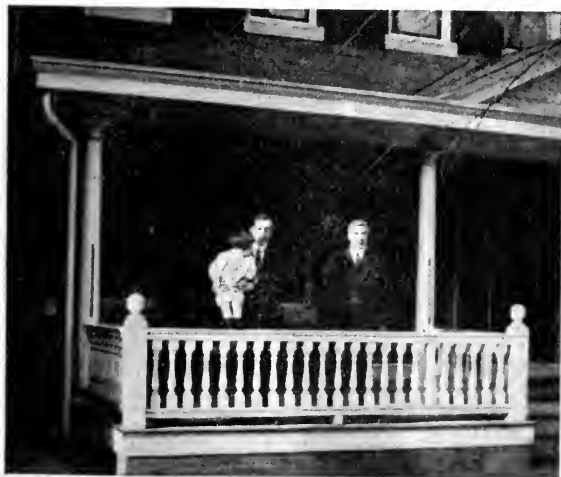


FRANK G. RYAN.

ing. It is a reward of unusual merit. Mr. Ryan is an alumnus of the College, and was for fourteen years a member of the faculty.

THE FRAILEY DYNASTY.

Everybody in N. A. R. D. and A. D. S. circles knows who William O. Frailey is, and no one need be told that he has two prosperous



THE THREE FRAILEYS.

stores in Lancaster, Pa. We recently asked Mr. Frailey to send us a picture of his residence, and what he supplied instead was a

photograph of his front porch. But since incidentally this shows three generations of the Frailey family we ought not to be disappointed. For here we have portraits of William O. Frailey, Sr., William O. Frailey, Jr., and William O. Frailey, 3d. William O., Jr., is manager of the branch store on East King Street, while Billy the Third will some day be manager of another branch. Thus the Frailey dynasty in the drug business promises to make history.

PHARMACIST AND MASON.

Frank Richardson, of Cambridge, N. Y., has been treasurer of the New York State Pharmaceutical Association now for eight or ten years, and seems to have a life tenure on the job. We doubt even if the adoption of T. R.'s recall methods would oust him from the



FRANK RICHARDSON.

place. This is what it means to give permanent satisfaction. Mr. Richardson was graduated from the Albany College of Pharmacy twenty years or more ago. He was high honor man, and for a reasonable period after that he was a member of the faculty. During this time he had a store in Albany, but later on he listened to the alluring call of the open, and so hied himself up to Cambridge, where there was more green grass and fresh air, and where the life of the retailer was somewhat less irksome. Incidentally Mr. Richardson is quite prominent in the Masonic fraternity, and he is now, among other things, president of the Past Masters' Association of the Twentieth Masonic District.



The home of Dr. James H. Beal, in Scio, Ohio, general secretary of the A. Ph. A. and editor of the official journal.



Residence of Henry P. Hynson, the well-known Baltimore pharmacist, in the beautiful suburban region known as Roland Park.



Frank Richardson, whose home this is in Cambridge, N. Y., has been treasurer for some years of the State Pharmaceutical Association.



Frank W. Bucknam, of Skowhegan, Maine, has been for some years a member of the State Board of Pharmacy.



George Reimann, the Buffalo pharmacist, has his residence at 12 Willow Lawn, with a garage in the rear.



Here we have Mr. and Mrs. Reimann in their Ford runabout, in front of the Reimann residence shown in the other picture.

Homes of Well-known Druggists.



E. E. Calkins, located in the University town of Ann Arbor, Michigan, was president last year of the State Pharmaceutical Association.



Here we have a view of the living room in the residence of J. J. Goodyear, who is next-door neighbor to Mr. Calkins in Ann Arbor.



William S. Elkin, Jr., of Atlanta, Ga., is well known as one of the ex-presidents of the National Association of Retail Druggists.



Here we have the comfortable, vine-clad, Southern residence of Prof. R. H. Needham, 1311 Harrington Ave., Fort Worth, Tex.



This cut shows an interior view of the home of George W. Parisen at 321 High Street, Perth Amboy, N. J.



Here we have the residence of M. Noll at 605 Atchison Street, Atchison, Kansas.

Homes of Well-known Druggists.



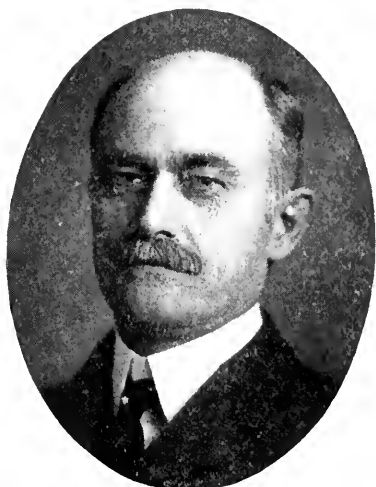
John W. Durr, the Durr Drug Co., Montgomery, Ala.



David M. Cowan, Plimpton, Cowan & Co., Buffalo, N. Y.



Theodore F. Meyer, Meyer Brothers Drug Co., St. Louis, Mo.



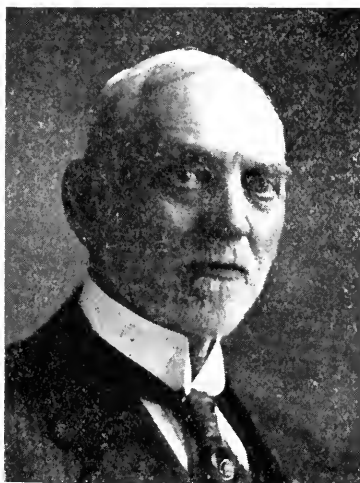
Lucien B. Hall, the Hall-Van Gorder Co., Cleveland, Ohio.



L. D. Sale, Western Wholesale Drug Co., Los Angeles, Cal.



Dr. William J. Schieffelin, Schieffelin & Co., New York City.



Charles F. Weller, Richardson Drug Co., Omaha, Neb.



B. C. Hartz, Hartz & Bahnsen Co., Rock Island, Ill.



Donald McKesson, McKesson & Robbins, New York City.



George H. White, Phar.D., Jersey City, N. J., president of the New Jersey Board.



Henry M. Faser, University, Miss., president of the Mississippi Board.



Arthur von Rohr, Winona, Minn., president of the Minnesota Board.



James H. Martin, Winchester, Ky., president of the Kentucky Board.



J. B. Michels, El Paso, Ill., president of the Illinois Board.



William C. Powell, Snow Hill, Md., president of the Maryland Board.



I. W. Clements, Marengo, Ia., president of the Iowa Board.



Byron M. Hyde, Rochester, N. Y., president of the New York Board.



Floyd W. Brown, Lead, S. D., president of the South Dakota Board.

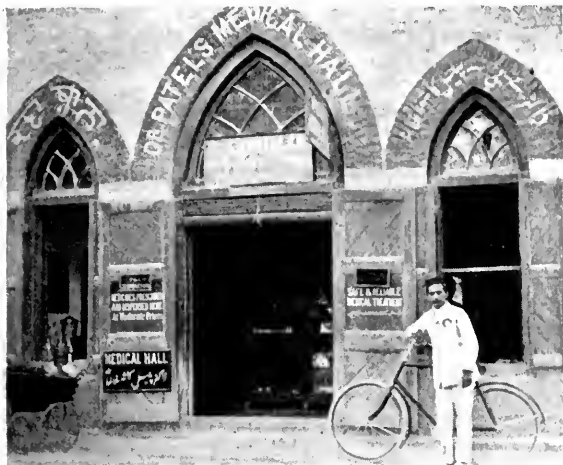
Presidents of Some of the State Boards of Pharmacy.



[Picture made especially for the BULLETIN OF PHARMACY.]

Druggists Photographed in Their Stores.

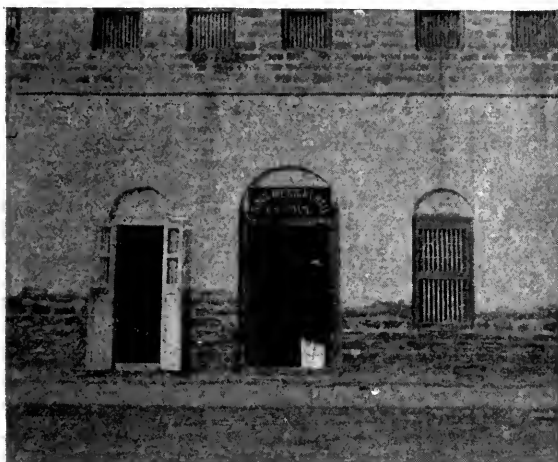
3. Joseph F. Forbrich, Chicago, Illinois,



The first three views on this page represent drug stores in East India. This particular one is the pharmacy of Dr. K. B. Patel in Quetta, Baluchistan.



Here we have a handsome building containing the up-to-date pharmacy of E. Speechley, in Karachi, India. Mr. Speechley evidently owns the entire structure.



We are now looking at a typical drug shop of the smaller towns in India. This one is located in the Punjab at Hyderabad.



Jumping now over into the Philippines, we show a typical "Botica," with some of the Filipino sports about the entrance.



We are now in Japan, and this pharmacy we find located about 100 miles from Tokyo near the Asama Mountain. The manager is J. A. Fenner, a graduate of the School of Pharmacy of the University of Michigan.



Still in Japan, we have in the first store at the left an American pharmacy in the city of Tokyo. This store is under the management of Mr. Fenner also. The street is a typical one in Tokyo.

Three Prize Hair-Tonic Formulas.

In awarding prizes in the recent contest conducted by the BULLETIN for best hair-tonic formulas, the Prize Committee feels it only fitting to explain why many of the products failed to receive favorable consideration. Several had too high a percentage of alcohol, making the mixture too expensive for general sale. Others were excellent dandruff removers but not hair tonics—that is to say, they contained antiseptics but not scalp stimulants. Still others included chloral, which is objectionable because it must be mentioned on the label to the uneasiness of the customer. A few had objectionable ingredients such as corrosive sublimate or lead acetate, chemicals to which some people are susceptible. The three prize-winning formulas we believe to be excellent, and we are giving honorable mention to several others.—THE COMMITTEE.

FIRST PRIZE FORMULA.

By DAISY A. FRICK, AUDUBON, IOWA.

RESOR-QUINOL HAIR TONIC.

I find that I am becoming enthusiastic over the hair-tonic proposition. The formula which I submit is my own and is actually resulting in



A 6-ounce package of "Resor-Quinol Hair Tonic"—the product winning the prize.

increased sales. I just had a "come-back" for \$5.00 worth. I sell 6 bottles for \$5.00. It is a repeater. Moreover, every time we sell a bottle of hair tonic, we recommend and almost invariably sell a shampoo bag at ten cents or three for a quarter. The customer is advised to keep the hair clean.

I submit a specimen package of our Tonic, and also one of our newspaper ads. The formula reads:

Quinine½ drachm.

Resorcin 4 drachms.
Tincture of jaborandi..... 2 ounces.
Tincture of cantharides..... 4 drachms.

Have You Dandruff?

Does Your Hair Fall Out?

Do You Know What Resor-Quinol Hair Tonic Will Do?

FIRST—It makes the scalp healthy. In doing this the dandruff is removed—the hair stops falling out—new hair grows—old hair is given new life.

SECOND—It keeps the scalp healthy.

What does?

Resor-Quinol Hair Tonic.

What is it?

Not an experiment, but our own well-tested formula, indorsed by physicians.

Price, \$1.00 a Bottle.

Trial size, 25 cents.

FRICK DRUG CO.

Newspaper ad. of the Frick hair tonic.

Alcohol 4 ounces.
Spirit of myrcia.....16 ounces.
Rose water 9 ounces.
Mix and perfume with oil of
bergamot½ drachm.
Oil of rose geranium.....½ drachm.
Oil of cologne.....½ drachm.

Add the oils to the alcohol first. Add aromatic sulphuric acid, three drachms, to the quinine. Mix all. Filter, twice if necessary. This makes a full quart. The amount of alcohol is 50 per cent.

We dispense the tonic in a six-ounce sprinkler-top bottle, with the label on the flat side of the bottle. The total cost of one bottle is 20 cents. It brings us \$1.00.

SECOND PRIZE FORMULA.

By I. S. PLADSON, STURGIS, S. D.

This formula has given good satisfaction. The preparation supplies both germicidal and tonic properties, which should be the first aim of any good hair tonic. The resorcin is antiseptic and the cantharides a powerful local stimulant. The betanaphthol furnishes a good germicide. The jaborandi tends to restore the natural color of the hair, though it does not dye or stain the hair. The formula reads:

Resorcin	10 grammes.
Tincture of cantharides.....	10 Cc.
Fluidextract of jaborandi....	10 Cc.
Betanaphthol	10 grammes.
Oil of bergamot.....	15 minims.
Glycerin	60 Cc.
Alcohol,	
Rose water..ää q. s. to make	500 Cc.

FORMULAS RECEIVING HONORABLE MENTION.

In addition to the three prize winners, the committee thought the following formulas were deserving of honorable mention:

By C. A. HOUGEN, DURAND, WIS.

We generally put our hair tonic up in half-pound perfume bottles or in plain 8-ounce ovals with a purple cap over the cork. It sells for 75 cents. As it only costs about 20 to 25 cents, the profit is a very fair one:

Boric acid.....	1 ounce.
Salicylic acid.....	½ ounce.
Resorcin	4 scruples.
Glycerin	1 fluidounce.
Oil of rose geranium.....	12 minims.
Oil of bergamot.....	4 minims.
Alcohol	1 pint.
Water distilled to make.....	1 quart.
Color with tincture of curcuma if wanted.	

We sell the product on a strict guarantee that if it does not positively stop falling hair and eradicate dandruff "you get your money back." We have sold hundreds of bottles and have only had one returned so far, and that one we sold to a man who asked for something else, and wanted it for his wife. That he wanted it for her he did not tell us, or we should have known better. She refused to try it, and consequently missed a good thing.

We have used newspaper ads. to push this

No sediment is deposited on standing, nor does the product need to be filtered. It has a good color and pleasant odor. It is put up in eight- and sixteen-ounce dark, amber-colored bottles with sprinkler top. It sells for fifty cents and a dollar, which gives a good margin of profit. With a little push it ought to be a good seller with any one.

THIRD PRIZE FORMULA.

By F. P. THERIOT, GRETN, LA.

Resorcin	1 drachm.
Quinine sulphate.....	1 scruple.
Bay rum.....	4 fluidrachms.
Glycerin	4 fluidrachms.
Tincture of cantharides....	2 fluidrachms.
Tincture of capsicum.....	2 fluidrachms.
Fluidextract of jaborandi...	2 fluidrachms.
Alcohol	2 ounces.
Water, q. s. ad.....	16 ounces.

Mix and dissolve. Florame extract, 1 drachm, for perfume.

The preparation may be colored red if desired by means of red saunders.

preparation—sometimes with noticeable results and sometimes with indifferent success. Our long suit is to push it over the counter to people who want something for themselves.

By H. C. LANDAU, GETTYSBURG, PA.

This is a hair tonic which I have used for years and on which I have an excellent trade. It always gives satisfaction and never arouses a complaint. It will stop an itching scalp within an hour, stop dandruff in two applications, and will promote the growth of hair. It is sold under this guarantee, and I have never returned a cent. Every bottle sold brings a demand for another one.

Quinine sulphate.....	2 drachms.
Resorcin	20 grains.
Menthol	20 grains.
Tincture of capsicum.....	6 drachms.
Tincture of cantharides.....	6 drachms.
Spirits of ammonia aromatic..	4 drachms.
Glycerin	4 drachms.
Alcohol diluted, q. s. ad.....	16 ounces.

Perfume with dactylis or to suit. No artificial coloring is used. Apply to scalp with finger-tips, massage lightly every night for a week, then once a week, for an invigorating tonic.

The prices are: 4 ounces, 25 cents; 8 ounces, 50 cents; 16 ounces, \$1.00.

BY WILLIAM H. TABACNIC, PH.G.,
ST. LOUIS, MO.

Our preparation can be made for about 85 cents a quart. It is put up in four-ounce fancy bottles and retails for 50 cents a bottle. A package of this preparation, including cork, label, etc., costs about 15 cents, netting a profit of about 70 per cent. Of course it could be made a little cheaper by decreasing the amount of alcohol, etc., but I would hardly advise it as I have found the proportions of the ingredients in this formula to be just right. I have used the formula for several years and have observed it is a good repeater. It is an excellent preparation for dandruff and falling hair, and an elegant hair dressing. It is to be rubbed into the scalp as often as required.

I recommend when selling my hair tonic the use of my liquid shampoo for shampooing the hair. This is merely tincture of green soap perfumed. I seldom fail to make a sale of my shampoo with each purchase of my hair tonic. The latter is:

Mercuric chloride..... 2 grammes.
Salicylic acid..... 10 grammes.
Resorcinol 30 grammes.
Tincture of cantharides..... 30 grammes.
Glycerin100 grammes.
Alcohol500 Cc.
Water, q. s. to make.....1000 Cc.
Perfume to suit (rose).

Dissolve the bichloride, salicylic acid, and the resorcinol in the alcohol. Add the tincture of cantharides, glycerin, and water. Perfume and filter.

I use a rose odor myself, but the individual can use any odor that pleases. This preparation acquires a light lavender color, without any coloring agent being used.

BY E. W. THRALLS, HAYDEN, COLO.

Salicin 1 drachm.
Resorcin 2 drachms.
Tincture of cantharides..... 2 drachms.
Tincture of capsicum..... 2 drachms.
Glycerin 1 ounce.
Rose water 6 ounces.
Bay rum, q. s. ad16 ounces.

Dissolve the chemicals in the rose water. Add the tinctures and the glycerin, and finally the bay rum. Color to suit with tincture of cudbear, N. F.

I have found this to be highly successful in cases of dandruff and falling hair, and as a stimulant to the scalp. It is of great value in eczematous diseases of the scalp. It is easily and quickly prepared on account of the ready

solubility of the chemicals. I have never exploited it nor advertised it as shelf goods, but have handed out many bottles as a special preparation. I charge 50 cents for a six-ounce bottle. The cost, as one can readily see, is inconsiderable.

BY G. W. PFENDER, CHICAGO, ILL.

Our preparation has proved very good. It will certainly stop the formation of dandruff, loss of hair, and cause new hair to grow when other remedies have no effect. Three of our customers now have a splendid growth of hair after it had fallen out from syphilis. Many others use it as a general hair tonic.

Resorcinol 3 drachms.
Glycerin 1 drachm.
Tincture of cantharides..... 3 drachms.
Water and alcohol, enough to
make 6 ounces.

Perfume with a few drops of a mixture of oil of bergamot, geranium, citronella, and cinnamon.

BY OTTO C. McCARTY, CARTHAGE, INDIANA.

This preparation has been used in my brother's barber shop for a number of years and was originally obtained from a New York hair specialist:

Spirit of ammonia aromatic...½ ounce.
Solution of potassium arsenite½ ounce.
Tincture of nux vomica.....½ ounce.
Tincture of capsicum..... 2 drachms.
Tincture of cantharides..... 2 drachms.
Glycerin 2 drachms.
Bay rum..... 1 ounce.
Rose water, q. s..... 8 ounces.

Rub well into the scalp two or three times a week for dandruff and falling hair.

This is the best remedy I have ever seen for dandruff, falling hair, and itching of the scalp.

BY DAVID I. COHEN, PH.G., JERSEY CITY.

Quinine alkaloid..... ½ drachm.
Mercuric chloride 2 grains.
Chloral hydrate 2 drachms.
Resorcin1½ drachms.
Tincture of capsicum..... 2 drachms.
Tincture of cantharides..... ½ ounce.
Oil of bay..... 15 drops.
Alcohol 6 ounces.
Aqua, q. s..... 16 ounces.

Directions: Massage well into the scalp once a day, preferably on retiring. In obstinate cases should be used twice daily until improvement is noticed.

BY CHARLES R. ARCHIBALD, NOKOMIS, ILL.

Pilocarpine nitrate.....	0.4	gramme.
Quinine sulphate.....	0.14	gramme.
Tincture of cantharides....	12	Cc.
Tincture of capsicum.....	12	Cc.
Spirit of myrcia.....	90	Cc.
Alcohol, q. s. ad.....	180	Cc.

Mix and make solution. Perfume to suit.

Apply daily to the scalp.

BY D. COHEN, LOS ANGELES, CAL.

Resorcin	15	grains.
Salicylic acid.....	15	grains.
Boric acid	15	grains.
Quinine sulphate.....	10	grains.
Tincture of cantharides.....	1	drachm.
Tincture of sanguinaria.....	1	drachm.
Tincture of lavender compound.	1	drachm.
Alcohol	2	ounces.
Bay rum to make.....	8	ounces.

BY C. J. WALL, GRAPEVINE, TEXAS.

Resorcin	1	drachm.
Tincture of cantharides.....	2	drachms.
Fluidextract of jaborandi....	2	drachms.
Tincture of cinchona flava....	2	ounces.
Essence violettes.....	1	drachm.
Spirit of myrcia.....q. s. ad	8	ounces.

Mix.

BY F. D. G. WALKER, ROCK ISLAND, ILL.

Arsenous acid.....	6	grains.
Potassium bicarbonate.....	2½	drachms.
Sulphuric acid.....	5	minims.
Glycerin	1	drachm.
Alcohol	4	drachms.
Oil of rosemary.....	1	minim.
Oil of lavender.....	2	minims.
Caramel enough to make light amber.		
Water sufficient to make.....	12	ounces.

Mix.

Apply to the roots of the hair, rubbing briskly, every two or three days for three weeks. Then use once a week to keep the scalp in good condition.

BY M. KALMANOR, MORRIS PLAINS, N. J.

Quinine sulphate.....	10½	drachms.
Tincture of capsicum.....	7	drachms.
Tincture of cantharides.....	4	ounces.
Fluidextract of jaborandi...	4	ounces.
Corrosive sublimate.....	21	grains.
Bay rum.....	26	ounces.
Oil of lavender.....	10½	drachms.
Glycerin	10½	ounces.
Alcohol	42	ounces.
Purified talcum.....	2	ounces.
Water to make.....	1	gallon.

Dissolve the quinine and oil in the alcohol. Add to

it the corrosive sublimate previously dissolved in hot water. Then add to this the rest of the ingredients. Let it stand for 24 hours and filter.

BY C. M. EVANS, MT. HOREB, WIS.

Resorcin	2	ounces.
Glycerin	2½	ounces.
Tincture of cantharides.....	2½	ounces.
Tincture of cinchona comp.....	5	ounces.
Alcohol,		
Bay rum, of each.....	3	pints, 12 ounces.

Apply to the scalp two or three times a week.

BY CARL R. FIEBICH, PROVIDENCE, R. I.

Resorcin	2	drachms.
Salicylic acid.....	½	drachm.
Castor oil.....	1	ounce.
Alcohol	8	ounces.
Tannic acid.....	10	grains.
Distilled water enough to		
make	2	pints.
Perfume Otto of Jockey Club..	15	drops.
Color with "Evergreen".....	10	drops.

BY W. M. RICKERT, FAYETTE, IOWA.

Corrosive sublimate.....	2	grains.
Tincture of cantharides.....	½	ounce.
Glycerin	½	ounce.
Resorcin	2	drachms.
Alcohol	4	ounces.
Distilled water q. s. to.....	8	ounces.

Mix.

Apply night and morning, rubbing in well with the finger-tips.

We have colored it and perfumed it, but most of our trade prefer it as given above.

BY FRANK W. SMITH, BUFFALO, N. Y.

Sodium chloride.....	120	grains.
Precipitated sulphur	60	grains.
Lead acetate.....	60	grains.
Glycerin	½	pint.
Bay rum	3	fluidounces.
Jamaica rum.....	¼	pint.
Water	1	pint (not more).
Grain alcohol.....	1	fluidounce.

Scent to suit, bergamot oil preferred.

BY F. P. TAYLOR, MINOT, N. D.

Resorcin	2	drachms.
Tincture of cantharides.....	1	drachm.
Tincture of capsicum.....	1	drachm.
Oil of bergamot.....	15	minims.
Bay rum.....	1	ounce.
Glycerin	4	drachms.
Alcohol, enough to make.....	4	ounces.
Color with green vegetable		
coloring,	15	minims to 4 ounces.

Rub in the scalp with tips of fingers twice a week.

CARMEL HAIR TONIC A SELLER.

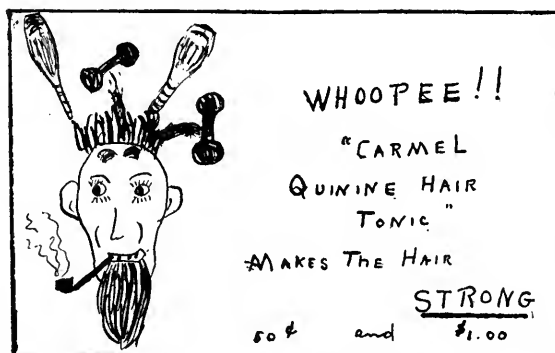
BY H. KALLIWODA,
San Francisco, Cal.

For a number of years I have been putting up and selling "Carmel Hair Tonic" with gratifying results. My preparation is a winner and a repeater. I put it up in ordinary prescription ovals, 8 ounces, and sell it for \$1.00. I also run a trial size, a 4½-ounce panel, which sells for 50 cents.

I attribute a great deal of my success to the simple yet impressive style of my package, as well as to its merits.

The bottle should be tightly corked, capped, and string-sealed. It should have a good label, not a plain one. Spend a cent at least for it. A woman's head with an abundance of hair makes a fine centerpiece, around which the name appears. The package should be wrapped with transparent parchment paper, making a neat and attractive appearance. The word "Quinine" catches many. I always keep a few bottles on my counter, *priced*. Any one wishing another hair tonic gets it, but I often manage to get rid of mine instead, not by the "just as good" stunt, however, but by a nice, convincing line of talk. I put my personal recommendation behind the article. If you have a nice head of hair, show it to your customer.

Once in a while I display it. Sometimes I get a few china eggs and door-knobs and place them in the window with a sign to this effect, "Guaranteed to grow hair on a door-knob, why not on *your* knob?" The bottom of the display is covered with mattress stuffing or barber-shop trimmings. I have a large sign as follows:



A reproduction of a window sign used by Mr. Kalliwoda to advertise his hair tonic—purposely made amateurish.

The crudeness of my picture draws attention. The rest of the window convinces.

Here is another little "booster." In my talk to a customer, I mention the fact that he can

feel it almost as soon as it is applied. This is true. The menthol is added for that purpose. It gives a peculiar cooling sensation, as though the hair were beginning to sprout. Anyway, it affects the mind, and that is half the battle. Directions should emphasize to rub well. For the friction and circulation restored, is another factor in propagating the growth.

The formula and cost of the tonic is here given.

"CARMEL QUININE HAIR TONIC."

Pilocarpine hydrochloride—2 drachms, @ \$1.50 a drachm	\$3.00
Resorcin—5½ ounces, @ \$1.10 a pound.....	.39
Chloral hydrate—5½ ounces, @ \$1.18 a pound....	.40
Quinine sulphate—5 ounces, @ 16c per 100 ounce lots .....	.80
Betanaphthol—5½ ounces, @ \$1.45 a pound.....	.49
Menthol—1 ounce, @ 60c an ounce.....	.60
Alcohol—1½ gallons, @ \$2.96 a gallon.....	4.44
Glycerin—1 pint, @ 22c a pound.....	.27
Oil of bergamot—1 ounce, @ \$6.00 a pound.....	.40
HCl, Tincture of alkanet—ää q. s.....	.05
Water, q. s.—5 gallons.....	.35
	<hr/> \$10.84

1. Dissolve the pilocarpine in 2 ounces of water; add tincture alkanet, q. s.

2. Dissolve the resorcin and chloral in 1 quart of water.

3. Dissolve the oil of bergamot in 8 ounces of alcohol.

4. Dissolve the naphthol and menthol in 1 quart of alcohol.

5. Dissolve the quinine in alcohol (acidulating with HCl until end point is reached).

6. Mix the remainder of alcohol with the glycerin. Add 1 gallon of water.

7. Now mix solutions 3 and 4, then 5. Add this mixture to 6. Add solution 2.

8. Now gradually add water to make 5 gallons. A slight precipitate may form, probably naphthol. Filter, add solution 1, and put up in eight-ounce bottles.

Additional costs may be summed up as follows:

Labels	\$.50
Corks.....No. 50, \$3.50 M. ....	.28
Caps.....@ \$0.35 per gross .....	.29
Bottles.....@ \$3.75 per gross	3.12
Parchment paper.....	.10
Sealing wax.....	.05
½ day's labor.....	1.50

\$ 5.84

Cost of tonic 10.84

Total cost of 80 bottles.....\$16.68

80 bottles @ \$1.00..... 80.00

Profit on cost.....\$63.32

or Profit on cost approximately....38.5 per cent.

The color and odor may be varied to suit the taste. Without alkanet the tonic is lemon color. Some people prefer a green, some a brown, etc.

The cost may be materially reduced by omitting the pilocarpine. But I consider it a

valuable ingredient and would not like to do without it in my own product.

And after all is said and done, I want to add that "Carniel Quinine Hair Tonic" has proved to be a "crackerjack." It has "brought home the bacon."

A TWO-PACKAGE HAIR TONIC.

BY S. C. COOPER, PHM.B.,
Lion's Head, Ont.

Perhaps more buncombe has been written and advertised about hair restorers than about any other medication, and a prize offer for the best formula for a hair tonic makes the pharmacist get right down to bed-rock.

The study of diseases of the hair does not reveal the definite unanimity that is apparent in most scientific data. Dead hair, like dead men, cannot be resurrected. The causes of baldness may be:

1. Temporary, through fever or sickness.
2. Pressure or irritation by head-dress or aught else upon the blood-vessels of the head, thus damming up the canals that supply nutrition.
3. Decomposition of perspiratory and oily secretions, giving rise to the production of bacteria, thus wasting the hair.
4. Dryness and disease of the scalp, usually termed dandruff.

We may regard the last three as producing permanent baldness if proper treatment be neglected. And we may safely infer that if treatment prove satisfactory in preventing permanent baldness, it will prove helpful in cases that are temporary. To master the situation we must:

1. Destroy or remove the disease, microbe, or germ, any or all of them.
2. Retain the area in a prophylactic condition.
3. Nurture mechanically, physiologically, and artificially that area, to produce the desired result.

So then proper treatment should comprise a cleanser—mechanical to remove superficial waste, chemical to act upon the oily secretions without undue causticity. Under mechanical means may be mentioned the use of warm water, soap, massaging with the finger-tips, drying by warm air rather than by violent rubbing of the hairs, perfectly clean head-dress—in this the Hindu teaches us a lesson—and exposure of scalp to the atmosphere. Under chemical means may be mentioned anti-

septic head-dress, a solvent of fatty excretions, and exposure of the scalp to the ozone of the air and to sunlight. We inscribe below what we consider to be an ideal cleanser, which may be used daily for a week, then as needed.

The cleanser should always be followed after an interval of eight to twelve hours by a tonic for the hair. An ideal tonic should comprise a germicide, an irritant, a rubefacient, and these in a soothing attractive vehicle.

After assembling, comparing, and rejecting a great many ingredients, I consider the formula of the hair tonic given below can for druggists' general purposes scarcely be improved upon. Furthermore, if the general system is toned up by an internal alternative and the rules for health relating to cleanliness, diet, exercise, and good living observed, the scalp will share the benefit with the rest of the body.

SCALP CLEANSER.

Oleic acid.....3½ ounces.
Alcohol (90 per cent).....1½ ounces.

Mix and neutralize with about ¾ fluidounce of saturated solution of potassium hydroxide; when cool add oil of lavender 10 minims; ether to 10 fluidounces.

HAIR TONIC.

Borate of soda.....200 grains.
Salicylic acid40 grains.
Boiling water.....10 ounces.
Tincture of cantharides.....2 ounces.
Bay rum.....1 ounce.
Rose water, enough to make....16 ounces.

The borax and the acid should first be dissolved in the boiling water, then cooled and the other liquids added. It should be well shaken and filtered before use.

It will be seen that we have avoided a shotgun formula. We have put in everything with a clear intention. We have made no guess, and offer no apology for the simplicity of the formula. We believe it is the best general recipe that has been formulated, and what is more, time and again it has "done the work."

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

(Continued from May BULLETIN.)

CHAPTER VI.

WORKING THE BEST SCHEME OF ALL.

The scheme that I followed up in the last few years is one that involved the use of cash register checks, and while it was something of an expense, it certainly did get the results.

The premium plan in various forms has been demonstrated time and again to be the best of all trade-getters. It has its disadvan-



Mr. Farrington.

tages, and I would not recommend it in all cases. But where it can be properly used, it has no equal.

PREMIUM PLANS.

In carrying out my plan I used a check-printing cash register, and the final scheme was only developed after experimenting with several which were successful only in a moderate degree.

One check plan that I tried was that of giving a pound box of candy to the person whose purchase drew a check with an even hundred number on it. This meant that check No. 100, 2300, 400, or 4000 drew a prize. I was able to get up only a little interest in this. It did not make any business as far as I was able to determine.

Other plans met with only partial success, and I found that one reason was that frequent changes in the scheme mixed up the people. They would just get the details of one plan well into mind when they would find that it had been discarded and some other taken up. Thus what seemed like good business, giving the public a variety and a change, proved a disadvantage. Any good, fair plan adhered to indefinitely and well advertised would, I am sure, produce profitable results in the end.

My final plan was to keep a standard set of premium goods, the same line continuously with occasional additions, and to give these out for set sums in cash-register checks. For instance, I picked out a pair of cut-glass salt and pepper shakers to give away for \$10 in checks. These and all the other premiums I set out to buy for about 5 per cent of the total amount of the checks. I picked out such goods as could be listed to the public at 10 per cent of the face value of their checks. An offer of 10 per cent of the checks given back in premiums would, I knew, look very good to every woman, and particularly so if I chose for premiums articles that would especially appeal to the feminine instinct.

THE CUT-GLASS OFFER.

Every woman likes cut glass, and cut glass pays a good profit. Hence my choice of this line at first. Here follows the proposition as

*Copyright, 1912, by Frank Farrington.

I outlined it in one of the first circulars I sent out:

SAVE THIS!!!

OUR FREE CUT-GLASS OFFER.

THIS LASTS TILL AFTER CHRISTMAS.

Save Your Checks and Get Cut Glass Presents Free.

With every cash purchase we give a check showing the amount of the purchase. These checks are good for prizes if dated Oct. 1 or later.

For \$10 in checks a pair of cut-glass salt and pepper shakers, worth \$1.25.

For \$15 in checks a cut-glass bonbon dish with handle, worth \$1.75.

For \$20 in checks a cut-glass bonbon dish worth \$2.

For \$25 in checks a cut-glass olive dish worth \$2.75.

For \$30 in checks a cut-glass bonbon dish worth \$3.25.

For \$35 in checks a cut-glass celery tray worth \$3.50.

For \$40 in checks a cut-glass sugar bowl and cream pitcher worth \$4.50 (not given out separately).

For \$45 in checks a cut-glass berry bowl worth \$5.

For \$50 in checks a cut-glass water bottle worth \$5.50.

This is all fine, high-grade cut glass, and will make elegant Christmas presents.

To find what your checks are worth just add up the amounts of the purchases indicated on them in red ink.

This offer will not be withdrawn until after the Holidays, and perhaps not then.

Save your own checks and get your neighbors who are not saving for themselves to save them for you.

You can see these prizes on exhibition in our store at any time.

If you are short of checks and want a premium at any time you can bring in what checks you have and you will be allowed 10 per cent of their face value on any cut-glass article, paying the balance in cash.

Here are some good, seasonable goods.

(Then followed a few special items in good values.)

This plan was started October 1, with a view to running it till January 1. Its popularity, however, and the realization of the disadvantage of making frequent changes in offers, caused me to retain it in force.

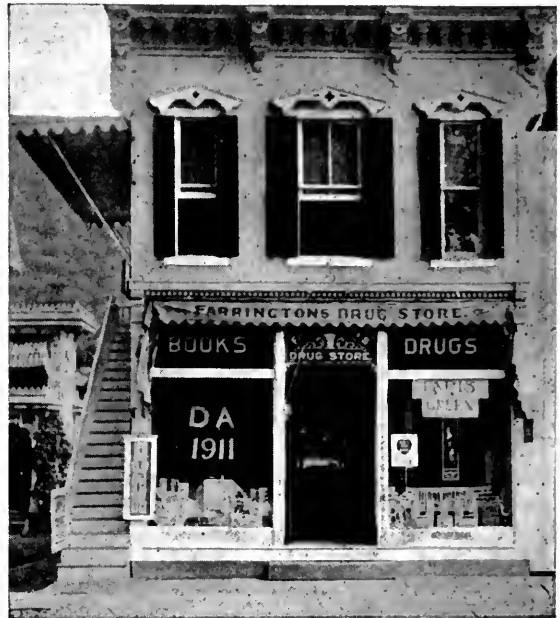
The approach of Christmas made it particularly easy to interest the people in the plan, and window displays of the cut glass were mighty attractive, headed as they were by big cards reading "These Given Away!"

I realized that the success of the plan lay in interesting the women, and we did everything to get them to begin saving their checks. We placed big cards about the store calling attention to the plan and pointing to the display of the premium goods.

The clerks were instructed to take pains to hand the checks to customers and not merely throw them out on the counter. And right

here is where the plan may fall down if not carefully handled. People not knowing of the plan will not be looking for the checks, and they will go away without them unless they are placed in their hands. This means that Mrs. A. hears Mrs. B. talking about her checks, and she thinks, "I didn't get any check with that hot-water bottle I bought," and she comes back and makes a fuss.

It is unavoidable that people get away a good many times without checks, and a rule must be made at the outset to cover such cases. In my store I made it a practice to give to any one coming back and claiming it, the check that was asked for. This may in a limited number of cases have resulted in the loss of a



Mr. Farrington's store as it was when he sold it last year.

check. I don't believe it ever did, but even if it did, it was far better than to send some one away with a grouch.

In our store we sold periodicals and took magazine subscriptions, and we gave checks on these transactions for a time, but eventually found it desirable to discontinue it, as it was often true that a subscription would not pay us a net profit with the cost of the check out.

One important result of the check system when once I got it under way was to eliminate most of the small amount of credit business we had been doing. As soon as a family got the check-saving habit, they would bring the money every time, and if they didn't have it, they would go home and get it or wait till the next day.

Of course most of our credit business was in small amounts. Our losses had always been a negligible quantity. This made them less than that.

For the store that has a good deal of credit trade this scheme is one of the best to turn it into cash. Of course in the case of a trade, particularly a city trade, where the credit customers are mainly wealthy families, the premiums would not attract.

FRUITS OF THE PREMIUM PLAN.

But the big feature of the premium plan is that it makes every customer a fast customer. The woman who is trying to get \$25 worth of checks, is going to buy everything in the drug-store line possible at the store where she gets the checks. If she is passing a store on the

anything. They buy more at a drug store than they think.

Once show them that their checks will get them something before long and they are yours. In a small town a thing like this takes hold more rapidly than in a larger one. It spreads by word of mouth.

The premiums must be given as careful display as if they were goods offered for sale. And when people want to see them, either to take up one with their checks or merely to find out what they are like, they should be waited upon with the same courtesy as if making a purchase. If you offer people premiums and then are at all "crusty" about handing them out, you will soon spoil the effect of your gifts and make people unwilling to bother with them. Don't let it appear that you are putting a person under obligations, but rather give him the premium as his right, which it really is.

After running the premium plan for a time I found it desirable to add other premiums in order to interest more people. Some housewives did not care for cut glass. A good many men who would save checks for something they themselves wanted, would not bother with cut glass.

To help out, I added an assortment of dollar watches which I gave for \$10 in checks, though I did not state that they were dollar watches.

I gave out fountain pens, but with the understanding that they were not guaranteed as to durability, etc. For these I used some of the very heavily ornamented gold (?) and silver (?) kinds which cost little but look very valuable. A heavily gold mounted pen can be bought as low as \$1 net.

Japanese chinaware I found a good line—complete tea sets, cream and sugar sets, etc. These reduced the cost of the premium to about 4 per cent, and this figure was the one finally adopted as a cost basis.

This premium plan raised the business in a year from \$12,164 to \$13,859 cash receipts, which is a splendid gain in so small a community, where there is almost no chance to increase the total volume of trade.

In order to show the reader to what an extent the people went into the check-saving business, I want to call attention to the fact that recently when I sold my business and the checks were all called in either for premiums or for exchange checks which would be good with the new firm, the total checks brought in

Prizes For Boys and Girls!!

This tells how to get a prize absolutely free

With every cash sale in our store we give a check printed by the cash register.

The check shows the amount of the purchase.

Ask your friends to save their checks for you. Get all the checks you can. They are good for prizes. Checks under 5 cents in value not counted.

To the boy bringing us before May First the most checks we will give free a \$3 split bamboo fish pole.

To the boy bringing next to the most checks, a set of boxing gloves.

To the third and fourth next, each a trimmed steel yacht all ready to launch.

To the next six each a good catcher's mitt.

To the girl bringing us the most checks before May First, we will give free a fine \$4 English cab doll carriage.

To the girl bringing us next to the most, a pair of Winslow roller skates. Good ones.

To the third and fourth girls, each a 50 cent box of water colors.

To the next six each a 25 cent package of fine perfumery.

To the boy or girl bringing the largest single check, one of the trimmed steel yachts.

To the boy or girl bringing the most checks of a dollar or more each, one of the steel yachts.

FARRINGTON'S DRUG STORE

A newspaper ad. exploiting a prize scheme designed to make every boy and girl in town a rooter for the Farrington store.

other side of the street and happens to think that she needs a ten-cent tube of vaselin, she is not going in there for it. No, sir! She is going to cross the street and get that ten-cent check. Every little bit helps.

This is not theory; it is fact.

That woman is also going to ask her friends whether they have any checks that they don't want. They may turn over the first lot to her, but when they see the dandy piece of cut glass she gets for them, they will begin to save for themselves.

It is a little difficult at first to show people that their purchases are going to amount to enough in the near future to enable them to get a premium. They do not realize that their purchases count up to enough to amount to

amounted to \$3284, which represented the average amount constantly outstanding. Of course this looks big, but four per cent of it would not impoverish you at any time.

WHEN TO STOP.

The greatest difficulty with this plan is in getting rid of it if one wishes to do so. When it stops increasing the business, it should not be carried any longer. It is too much of a load unless it is getting enough trade, not to be had otherwise, to pay for it.

It may be discontinued at a change of ownership, of course, though that is not wise, as it makes the new concern look penurious. A special bargain sale may be made offering many attractive prices and the announcement made that in the future, instead of checks, extra values are to be given to offset them.

But about the best way, and the one least likely to result in a slump in the business, is to keep reducing the cost of the premiums by giving a little less value until people slowly lose interest. At the same time the variety of premiums may be limited with the same object.

Of course it is difficult to reduce the value of the premiums by raising the amount of checks required for a specific article or giving an inferior premium for a given amount. But it can be done in other ways. For instance, the premium at \$10 costing 50 cents can be changed to one of silverware costing 40 cents, or to one of Japanese china costing 35 cents, etc. We found silverware of standard patterns valuable as premiums. We could buy a certain well-known make of plated silver teaspoons of an advertised pattern for \$2.41 per dozen. When a person brought in \$5 in checks he got one of these. Customers could keep getting more as they accumulated checks until they possessed a dozen, and then they

could begin on the knives or the forks of the same pattern, and so on.

We found it to be very seldom that people cared to pay the difference. If they had not checks enough, they would go away and wait till they had more.

ADVERTISING A PREMIUM PLAN.

A few newspaper advertisements are reproduced showing how we called attention to our premium plan. And the advertisement of "Prizes for Boys and Girls" shows how a previous very successful check plan was worked out. This one got all the children to working for the checks. While the total cost was not much, it certainly did get business.

This was put on in the spring, and the window display of the prizes secured the interest and coöperation of the youngsters right away. Give a boy a chance to get a baseball mask or glove free, or a good fishing pole, just as the season is opening, and he will work his head off trying to get it. The girls were just as enthusiastic as the boys, too, and the list of prizes was long enough so that every one had a hope of getting something.

The success of such a prize plan is always increased by making the list long enough so that every possible contestant will think, "Well, I can't get the first prize, perhaps, but there's enough of them, so I ought to be able to get something."

While not bearing any relation to the premium business, I want to crowd in right here a recommendation that the druggist take more trouble to get the business on bug killers.

There is a steady and quite rapid increase of the use of all kinds of insecticides—on plants, trees, animals, etc. The stockowner and the farmer and fruit-raiser are all banding against insect pests. The druggist who goes after

BUG KILLERS.

Get an early start after the insects.

The earlier you tackle them the easier it will be to kill them off.

Watch your currant and gooseberry bushes every day. A little hellebore in season will save many pounds of it later.

We sell good, pure white hellebore for 30c a pound. It's the best that money can buy. It will do the business every time.

Slug shot in 5-lb. packages for 30c a package.

Use it on the rose bushes—use it anywhere where there are bugs to be killed.

Paris Green, 40c per lb. this summer. Our stock is on hand. New stock, the strongest and best in the market.

Insect powder, the pure Persian article, 40c lb.

Blue virioli for spraying purposes, 15c per lb.; lowest price in quantity.

The greatest thing for lice on stock is Kresol Dip. Get a gallon. It costs less than any other and goes farther.

FARRINGTON'S DRUG STORE

Our Free Christmas Gifts

You can get these without any cost to you

With every cash purchase of any kind at our store we give a check showing the amount of your purchase.

These checks are good for free premiums in hand painted china, fountain pens, cut glass, etc.

\$5 worth of checks will get a Japanese china 8-piece tea set, or a hand decorated 2-piece set, or a watch, \$10 or more gets similar but better gifts and many others. The cut glass we give away is strictly high grade and of beautiful patterns.

By buying your Holiday goods from us you get checks which entitle you to other Holiday goods free.

Last week we gave a list here of many of the lines we have stocked for the Christmas trade. Look these goods over.

It doesn't cost you a cent to see what we have or to see these premiums. Watch our windows from now to Dec. 25th.

You can't get more for your money anywhere than we are giving this year.

FARRINGTON'S DRUG STORE

New Premium Goods

We have added some new things to the list.

Are you saving your cash register checks?

You know we give you premiums for them. We have a fine assortment of cut glass.

We have added to this some attractive china pieces and sets. Among them are chocolate and tea sets, separate chocolate pitchers, etc.

For \$5.00 in checks we give you a pretty little tea set of tea pot, sugar bowl and cream pitcher.

We have watches in nickel and gun metal cases for \$10.00 in checks. Good fountain pens and other goods.

If you are buying goods in our line, why not buy them here and get these premiums? We have not advanced the price of a single item to make up for these gifts to you.

FARRINGTON'S DRUG STORE

business along such lines, making a specialty of pushing good and modern preparations, is sure to be well repaid for it.

I went after this business with imitation typewritten letters and newspaper ads. and with the literature put out by the makers, and it developed into some of the best paying business the store had.

The reproduced advertisement, "Bug Kill-

ers," is a good type of the newspaper advertising along this line.

In the next chapter, which is the last one of this series, I am going to tell something about the use of special lines, and I shall also give an idea of the profits of the business, showing its receipts and expenditures for comparative terms.

(To be concluded in July.)

A STRIKING SODA WINDOW.

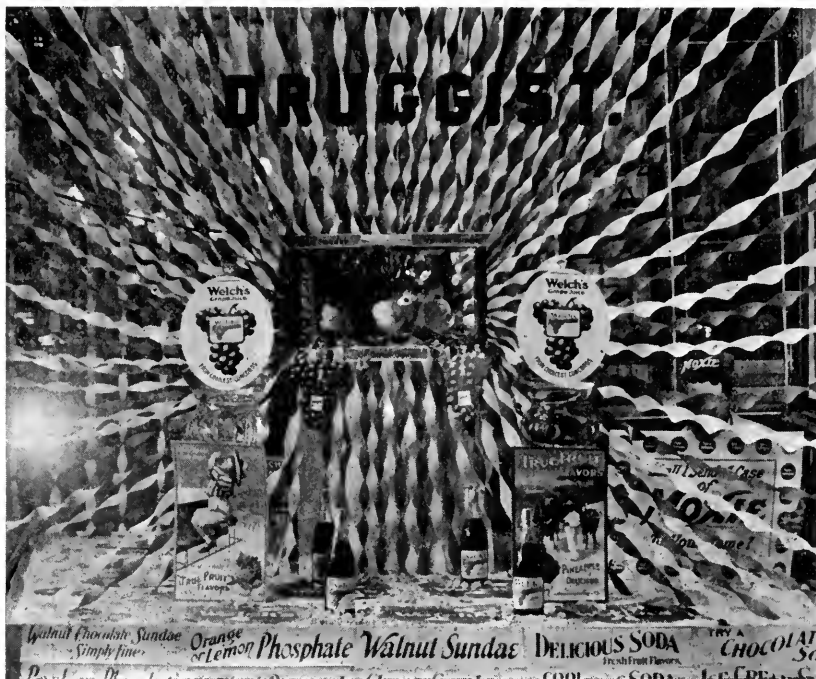
By **CARL E. BASTIAN,**
Dansville, N. Y

In this article I wish to describe a window display that appeared in the store of E. N. Bastian, Dansville, N. Y. It was arranged especially for the "old-home-week" celebration and stimulated soda business beyond all previous records.

The colors in the trim were grass green

a suggestion which I had read in the BULLETIN OF PHARMACY for preserving flowers in paraffin, using them in the display. Sweet peas were scattered about the base of the trim, and there were roses in the box.

Welch's Grape-Juice signs were used effectively in the center, while placards of Moxie



A soda trim in the window of E. N. Bastian.

and white. The strips running from the border of the window to the box in the center directed the course that the eye should follow. The box contained two mirrors set back at an angle of about 90 degrees. These reflected three dishes and three lights.

We used cotton with artificial cherries to represent the ice cream. In this, I followed

and other beverages appeared on the floor. A few bottles of grape-juice were also in evidence. Some of the store specials that found mention on the signs were walnut sundae and walnut chocolate sundae.

The display was full of color and naturally attracted the visitors who walked by the place during the week of the celebration.

How the Druggist's Sundries Are Made.

THIRD PAPER: RUBBER GOODS.

A Brief History of the Industry—Where the Crude Rubber is Gathered—The Discovery of Vulcanization and its Bearing on the Trade—The Various Manufacturing Processes—Precautions to be Observed in Buying the Goods.

By E. C. TIBBITTS,

Adv. Mngr. of The B. F. Goodrich Company, Akron, Ohio.

It is hard to realize how our forefathers—and our very immediate forefathers at that—managed to exist without rubber.

Less than a hundred years ago rubber was practically unknown, save as a curiosity, nor for many years after its introduction was its use recognized except for the erasing of pencil marks, whence its highly inappropriate name.

Not until 1820 was the first practical use of rubber made. In that year Charles Macintosh discovered that by dissolving rubber in naphtha and applying it to cloth, it was possible to make waterproof garments, but it was many years before any further advance was made.

VULCANIZATION AN AMERICAN DISCOVERY.

The discovery of vulcanization in 1839 may be said to have originated the modern rubber industry as we know it, and made practicable the manifold uses of rubber to which we have gradually grown accustomed.

To an American belongs the credit of this far-reaching discovery, and Americans have ever since been prominently associated with the phenomenal developments which have since ensued.

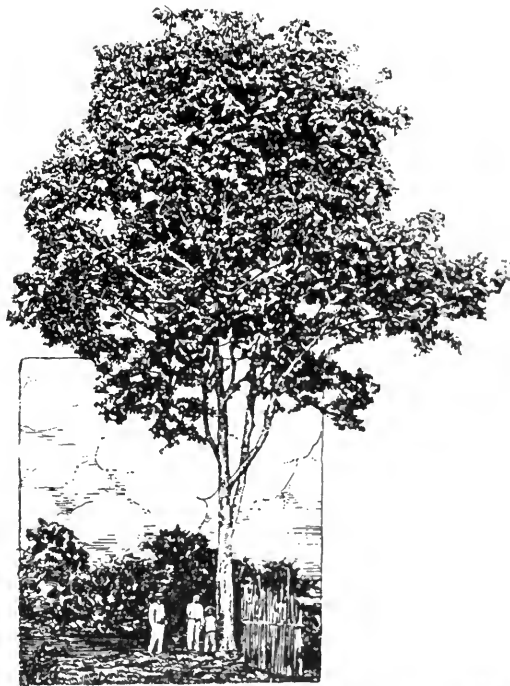
Prominent among these has been the name of Goodrich, the factory having grown from a staff of 35 in 1869 to its present importance as the largest rubber factory in the world. Its present pay-roll is over 6000 and constantly growing.

SOURCE OF THE CRUDE RUBBER.

Rubber is produced in some form or other in most tropical countries, its present limits being, however, a band of about 250 miles on each side of the equator.

The product of various countries varies greatly in quality, and for practical purposes the principal sources of supply are still limited to Brazil and some parts of Ceylon, although the great increase in demand has led to the employment of many other kinds. More careful cultivation and the introduction of new

plantations in many cases seeded from Brazilian trees will in time gradually broaden the area of supply besides greatly improving the quality of the product. At present by far the best rubber comes from Brazil, largely gathered from the "Hevea" trees in the forests of the upper reaches of the Amazon, and known as "Para" from its port of shipment. Such is its reputation that rubber growers in other



The *Hevea Brasiliensis*, from which the finest grade of Para rubber is secured.

parts of the world are importing "Para" seed in the hope of ultimately producing rubber of equal quality. But there is no doubt that climate plays an important part in the physical and chemical properties of rubber from this region.

Furthermore, Para rubber is generally more carefully gathered and prepared for shipment, and this has had great influence in building up its supremacy in the rubber markets of the world.

Next to Brazil comes Ceylon. Scientific planting and the selection of suitable trees, together with a congenial climate, have enabled the Cingalese planters to produce a rubber which is commercially fully equal to that of their great South American rival.

Many of the other countries of South and Central America are large producers of rubber, while the Congo Free State and other West African countries have achieved an unenviable reputation in this connection.

PRICE INCREASING.

The daily increasing demand is constantly broadening the field of supply, but notwithstanding the recent great increase in this direction the price of good rubber to-day is higher than for years and three or four times what it was twenty years ago.

While the development of the automobile is generally credited with much of this increased demand, there is no doubt that rubber to-day enters far more into our daily life than is generally imagined. And while the automobile has certainly created a new industry, it must be borne in mind that it was the introduction of the rubber tire and above all of the pneumatic tire which made the modern automobile a practical success.

GATHERING—SHIPPING—MARKETING.

As most of us know, the crude rubber is usually obtained by "tapping" the trees or vines. In some countries it is still customary to fell the trees, but this is being abandoned as wasteful and unnecessary.

The "latex" or gum is not the true sap of the tree, but lies between the bark and the wood. Consequently a slight upward incision is all that is necessary. A small tin cup is then attached to the trunk by means of a wad of clay and these cups are collected when full and the still fluid contents gathered into large bowls. About half a pound only is collected from each tree at one tapping.

The next process is coagulation, which is accomplished by means of heat.

In the Para district a rod or "paddle" is dipped in the latex and slowly revolved in the smoke of a fire of palm nuts. When dry another layer is added until the resulting "biscuit" aggregates a weight of about 100 pounds.

It is then ready for shipment, and is car-

ried in small boats or canoes for miles down river to the seaport. A cargo of crude rubber is valuable, a ton of it being worth about \$2500, while a shipment of several hundred tons is not uncommon.

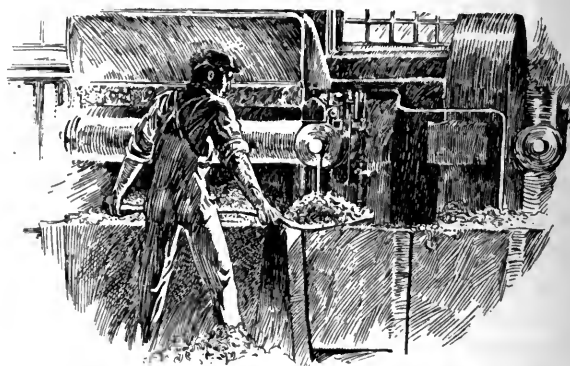
The principal markets are London and Liverpool, although Hamburg, Antwerp, and New York also receive large direct shipments.

The crude rubber is sold on sample, usually by public auction, and much judgment is required in the selection of the most suitable grades for the various requirements of the manufacturer.

THE MANUFACTURING PROCESS.

There is a vast difference between the crude rubber "biscuit" and the finished article. Offensive in odor and full of impurities, it is first necessary to "break down" the rubber and then wash out the impurities.

This is done with huge steel cutters and by



The illustration shows the lumps of rubber being shoveled from the washing tank to rolls, where water flows over the rubber constantly as it is being rolled into thin, porous sheets.

rollers with corrugated surfaces which tear the rubber into shreds, after which it is washed in hot water and the superfluous water expelled by further rolling, from which it emerges in large sheets. These are further dried in heated chambers at a carefully regulated temperature.

Hitherto we have dealt with more or less "pure" rubber, but for manufacturing purposes this pure rubber is practically useless and requires the addition of various ingredients, of which sulphur is one of the principal.

This unfortunately offers a large field for adulteration, and it is no exaggeration to say that some so-called "rubber" goods contain only sufficient real rubber to enable them to "hang" together.

While the goods of reliable makers are made

of freshly manufactured gum, in many of the cheaper lines it is customary to add a large proportion of "reclaimed" rubber, or in plain English, of second-hand used rubber which has been reclaimed by various processes from old tires, rubber shoes, etc.

"All that glitters is not gold," and unfortunately all is not rubber that looks like it.

VARIOUS PROCESSES.

When Pat was asked how they made a rubber ball, he answered, "Ye just take some air and shtick the rubber outside av it, an' there y'are."

It isn't quite so easy, but perhaps more interesting, as the process varies somewhat with nearly every article. Balls, bulbs, and similar articles are cut in sections from uncured rubber, and vulcanized in shaped molds of cast iron. A drop of water is placed in each before closing, and this, turned into steam by the great heat of vulcanization, "blows" the bulb into every crevice of the mold.

Others are made in press molds, partly vulcanized, and cemented together, after which they undergo a further process of curing.

Hot-water bottles and similar goods are stamped out of uncured sheet, and after the various parts have been cemented together, are cured as a whole.

The process of tube-making resembles the production of the homely sausage. Specially prepared rubber is fed into a hopper, and emerges from a nozzle in tubular form on to a table, where it is cut into suitable lengths. Larger tubes, however, are made from "sheet," and the edges cemented together by a machine which forms so perfect a joint as to be almost impossible of detection. This is the process followed in the making of the inner tubes of tires.

Rubber bands are cut from similar tubes, and after curing are cut by a machine to the required sizes. In the Goodrich factory, they are hand-picked before packing, so that none but absolutely perfect bands are ever sent out.

Small goods, such as teats, etc., are simply pressed in molds before curing. The rubber at this time is sufficiently soft to take any desired shape, which it afterwards retains through the finishing processes.

In the process of preparing the rubber, various compounds are introduced. Sulphur has been previously referred to, the proportion used varying according to the result desired. For red rubber, a preparation of antimony is used; for white, zinc; but nearly every manufacturer has his own more or less secret processes.

Space precludes further description, but practically all rubber articles follow the procedure here outlined, modified according to individual requirements.

SELLING IDEAS.

Druggists have been somewhat remiss in the attention they have given to rubber goods. They usually stock them but seldom make them a leading line. Consequently the hardware and dry goods stores have taken a deal of this trade. When nights begin to cool off, the hot-water bag or bottle is sometimes in evidence, but one rarely sees a really striking window display of seasonable rubber goods.

For the guidance of those who may not hitherto have devoted much attention to this line, we offer a short list of the principal rubber goods likely to be good sellers at different seasons. There are: Water bottles, covered and uncovered, syringes and douches, irrigation bags, air cushions, sponge and toilet bags, infants' diapers and nursing aprons, feeding bottles and accessories, teething rings, photographic bulbs and tubing, nasal bulbs, scent sprays and atomizers, rubber gloves, bathing caps, massage appliances, breast pumps, rubber bandages of various kinds, medicine droppers, ice-bags and caps, catheters, bedpans, chair and crutch tips, rubber bands, pencil rubbers, etc., and other medical and surgical appliances of various kinds.

These are all paying lines, and an occasional window display will do much to stimulate trade. It is little use having goods in stock if you do not show them. Attractive trims can be easily arranged, as most of the goods can be shown in the original boxes.

A final word of caution: *Don't overstock.* Rubber goods rapidly deteriorate with exposure, and it is better to get frequent supplies than to run the risk of carrying articles over from season to season.

THE VICTOR VANQUISHED.

In which a Druggist Matches Wits with a Money Lender—He Accepts a Loan at Extortionate Terms, but Gets Square in a Foxy Manner—Some Amusing Situations.

By ERNEST C. CRIPPS,
Berkhamsted, England.

"It is very certain, my dear, that *something* must be done, and that quickly," said John Stirling, as he cracked an egg and attacked its contents with the air of a desperate man.

He and his wife were at breakfast. She was somewhat crushed and worried looking, he prematurely bald and apologetic, taking hurried glances at his correspondence in the pauses of satisfying a still hearty appetite.

"It never rains but it pours," moodily continued the druggist, for that was his calling. "Just listen to this."

"'Messrs. Squills & Ipecac beg to remind Mr. Stirling that his account has now exceeded their limit of credit, and unless ——.' But there, you know the rest, my dear, don't you?"

"Then here again from Peters & Co. Where is it? Oh, yes. '—— thank Mr. Stirling for his kind order for drugs, which is having their best attention. In the meantime they beg to remind him that his account, etc., etc.' The last quarter's rates are overdue, and the water company threatened last week to cut off the supply if the rate was not paid in seven days; and the coal is almost out. Cash *must* be obtained somehow."

"It is no use asking your uncle," said Mrs. Sterling, despondently. "You remember how sarcastic he was last time. As for Aunt Martha, I would sooner *die* than let her know the plight we are in, wealthy though she is."

"If only some of those confounded customers of ours would pay up," interjected the druggist, "we could soon put matters right; but there seems precious little likelihood of that."

"But here's something I seem to have missed. I say, Maud, this looks more hopeful. Just you listen.

"'A private gentleman having a large sum of uninvested capital is willing to lend the same in sums of £10 to £1000, on note of hand alone, to farmers, tradesmen, mechanics, householders, and any respectable and responsible person. Distance no object. Interest is reasonable, and repayment can be arranged to

suit the convenience of the borrower. Upon receipt of application the lender will call and carry out the transaction without delay. All business treated as strictly confidential.'

"That certainly *sounds* all right. I'll keep the address, for we may yet have to apply to some such person. And now I must get into the pharmacy."

A few years before Stirling had taken a house and shop in one of the main streets of Barkington. With a few hundreds of pounds and a young wife, he had looked out on life through rose-colored spectacles. But as the years went by and the capital disappeared, and the young wife began to look middle-aged, the enthusiasm of his earlier years showed signs of dying out. Certainly he had built up a business which was now paying its way, but in doing so debts had been piled up and creditors were getting importunate. If he could only hang on another year or two, and get in a few of his accounts, he might yet weather the storm. For he was still solvent, but the lack of ready money barred the way.

It is not surprising therefore that a day came when it had to be procured, and a letter was despatched to Mr. Ready-cash, the author of the foregoing artfully worded epistle.

Needless to say this gentleman in due time responded, and one day appeared in person at the pharmacy. He was a short, alert man with a clean-shaven face, and his voice was pitched in a high key.

He wasted no time in preliminaries, but at once stated his mission.

"I understand," said he, "you wish to borrow fifty pounds. Will you kindly fill in answers to the questions upon this form?"

The druggist never realized before what an insatiable curiosity prompts those who engage in the money-lending business. When he was metaphorically drained dry of all possible information respecting his past and present, the man of cash gave his decision.

"Well, sir, I am prepared to advance you

the sum you require, namely fifty pounds, payable in monthly installments of ten pounds, the first to be made a month from date."

"And what interest," queried the druggist, "will you charge me for this accommodation?"

"Oh, the usual," said the money-lender, taking out his pocketbook and abstracting from thence a stamped blue paper. "The usual interest we charge for such cases as yours is twenty-five pounds!"

The sitting-room seemed to swim around poor Stirling. Twenty-five pounds for the use of fifty, and he was to commence repayment in a month's time!

He tried to work out the rate of interest, but his brain reeled and he could not. Oh, but it was monstrous! He could not take the loan on those terms. Far better to pay the man's expenses down and back, and scrape along somehow without it. But there was his wife! She was depending upon the acquisition of a little ready money to pay the household debts, and set matters on a more satisfactory footing.

"But, man," at last he said to the financier, "what you suggest is sheer robbery. You are satisfied that my assets will cover all my liabilities, including this suggested loan. Why not make it ten pounds; that will be nearly a hundred per cent per annum!"

But the other was obdurate and to all appeals turned a deaf ear. Twenty-five pounds or no business done. That was his alpha and omega!

"Well, will you give me a few moments before I decide, in which to consult my wife?" at last said the druggist.

"Certainly," replied the other, jingling his money, "and when you come back you might bring me a pen and some ink, for I left my fountain pen at home."

John Stirling went into the pharmacy and gazed moodily at the show bottles. The suggestion that he should consult his wife was but a ruse to gain a little time. He knew she left the whole matter entirely in his hands. There seemed no way out of the difficulty, except to sign the promissory note and engage to pay an extortionate sum as interest. And then his gaze encountered the shelves of his small laboratory, and an idea entered his mind of such suggestiveness and brilliance that he fairly staggered.

"Good!" he said, "I think that can be

worked! It is rather smart on my part, but it is a case of 'diamond cut diamond,' and I rather think our blood-sucking friend is about to have a much-needed lesson."

Picking up his inkpot, he emptied the contents. Carefully washing, he filled it up with a black fluid—one of the "sympathetic" inks he had used in his student days—and which, unlike most, was black when wet or damp, but quite colorless when dry.

Returning to the money-lender he announced that he was prepared—seeing he had no other alternative—to sign the promissory note, according to the terms proposed.

Mr. Ready-cash smiled a knowing and not pleasant smile. Using the pen and ink supplied, he drew up the document, which the druggist signed.

"And now," said the financier, folding up the document and putting it into an envelope after pressing the blotting-paper on it, "nothing more remains but for me to hand you the fifty pounds in gold, deducting the usual pound for out-of-pocket expenses in coming down here."

A sharp protest was on the other's tongue, but he swallowed it, and showing his visitor out he went back into the house to find his wife and acquaint her with what he had done.

* * *

One day, a few weeks after these events, Mr. Ready-cash sat in his office, in a thoughtful mood. Business lately had been prospering. Many visits had he paid to clients in need of his services and in every case he had exchanged coin of the realm for stamped paper.

"By the bye," he soliloquized, "the first payment of Stirling's is almost due. I must keep him strictly up to time. I'll just refresh my memory as to the exact date."

He opened his safe and took from it a bundle of envelopes, each of which contained a promissory note, the names and amounts being docketed on the outside, with the date and other particulars.

"Here we are—Stirling, £50." He had not looked at the document since the druggist had signed it, but when he out of curiosity extracted it from the envelope, his eyes grew large with surprise as he saw it was a perfectly blank piece of paper but for the red official stamp!

"Strange," he muttered, "I must have put it among my stock of unused notes and taken this instead."

He searched through all his stamped papers, he ransacked the safe, he turned out the drawers of his writing table, but no note signed "John Stirling" did he find.

Again he scrutinized the blank note, and then discovered in a corner a faintly pencilled figure "3," which he distinctly remembered noticing when the druggist signed it.

The agreement then *had* been drawn upon it; there remained the question, "Where was it now?"

To say that Mr. Ready-cash was startled is a mild way of stating the case. He was very seriously alarmed, and soon came to the conclusion that his best method would be to go down to Barkington and interview the druggist. He ruefully admitted to himself that he was anything but master of the situation, but trusted that "bounce"—an art in which he was an expert—would carry him through.

He found a very different John Stirling to the one he had seen on his last visit. The druggist was brisk, bland and smiling, and about the house and pharmacy were signs of prosperity not evident before.

"Well, Mr. Ready-cash," said he, "my first installment is not yet due; why have you honored me with this visit?"

The money-lender produced the blank note, and keeping tight hold of it by one corner, extended it in the direction of the other.

"That's my reason," he said, "I want to know how it is the writing on this has vanished? Don't think, sir, you are going to swindle me. Unless you can give some satisfactory reason for this, it will be very much the worse for you, I can assure you."

His temper was rapidly rising, but the druggist, with an amused smile upon his face, calmly examined the paper.

"Yes," he said at last, "a very satisfactory experiment. Do you know, Mr. Ready-cash, this blank piece of paper conclusively proves the soundness of a new hypothesis I have evolved with regard to the atomic theory?"

The financier attempted to say something, but his rage made him inarticulate. His mouth opened and shut, but before he could get a word in the other continued:

"But there, I don't suppose the atomic theory interests you just at present. What

you *are* anxious to know is how to restore the writing upon that piece of paper. Now just listen to me and I will give you the case packed small. I wanted to borrow fifty pounds and was willing to pay a reasonable interest upon the sum. You came down. You were quite satisfied with my security and realized that you ran no ultimate risk in the matter. But you also knew I was hard up and that I must have ready money, and so you insisted upon an interest that was most exorbitant and extortionate. Can you wonder that I tried to circumvent you?"

"As you may imagine, I have a pretty fair knowledge of chemistry, and as I stood in my shop the day you came, the idea suggested itself that you should use an ink for your promissory note similar to one my wife and myself used in our correspondence before we were married. This has, as you see, the peculiar property of vanishing when quite dry, but it can easily be restored by sponging or dampening with a certain liquid. An underhand trick, I hear you say? Probably it was, but when one has to fight men of your caliber, the weapons are not always of the best, don't you know!"

It was not likely Mr. Ready-cash would listen to this explanation quietly. He broke in upon it by loudly demanding his rights; talking wildly about the law; used threats and oaths alternately.

"Now don't upset yourself too much," pursued the druggist, "and very likely bring on an attack of angina pectoris, or some other heart trouble, but just listen to me. You talk about your rights and the law, but who is going to prove that I ever had the money at all? Eh, tell me that! You paid me in *gold*; that cannot be traced like notes or a check. Suppose I deny that I borrowed the money from you, as I easily could; what means have you of proving it?"

"You may thank your stars you have to do with an honest man. I confess that when I gave you that special ink, my intention was to use it as a lever with which to extract fairer and more reasonable terms from you. But since then, I am glad to say, an uncle has died and left me a legacy; so I can settle the matter right up here and now.

"I am going to pay you fifty pounds, plus fifty shillings, which is still rather over 60 per cent interest per annum, and should satisfy

any one—even a money-lender. Now will you take it in notes or gold?"

"Gold," said Mr. Ready-cash, sullenly; "I wouldn't trust even a bank note from this place now!"

"As you like," cheerfully replied the druggist, counting out the sum specified, "and if you will hand me over that piece of stamped paper, we shall then be quits.

"Thank you; and as the matter is now ami-

cably settled between us, perhaps you would like to see how easily the ink upon this can be restored to its pristine blackness.

"You see I simply moisten it with a piece of damp blotting-paper, and there it is! Now don't glare like that! It's too late now. But what a pity your knowledge of chemistry is not equal to that of finance. And now one word before we part. Another time don't forget your fountain pen!"

"MY BEST PAYING SIDE-LINE."

The Fourth of a Series of Articles by Different Druggists, in which Each Tells What Class of Goods has Paid Him Best—Strange to Say, Automobile Supplies Are the Source of Profit this Time.

By E. H. ROUSE,
Orange, Va.

I have found a very profitable side-line in automobile supplies. They pay a nice profit and at the same time you have no large amount of money invested.

This is a small town of less than one thou-



E. H. Rouse.

sand inhabitants, and the store is situated on a corner that has to be passed by every tourist taking the historic old stage route in traveling from Washington to Richmond or Richmond to Washington. There are probably a dozen

cars of various makes in and around town, and as no one in the town carried auto supplies we decided to put in a small line.

HOW THEY STARTED.

Our first order consisted of only the most necessary articles, such as spark plugs, patches, cement, batteries, battery connectors, tire tape, etc.; also gasoline, oil, and grease.

After a few weeks, when the local trade had become accustomed to coming to us for supplies, we began to increase our stock and to carry a more complete line, such as blow-out patches, tire covers, bumpers, brake bands, lining valve lifters, valve fittings, tube bags, pumps, gaskets, washers, burners, horn bulbs, amaters, tire gouges, chains, waste, and various other small fittings to enable the tourist to make quick repairs and replenish his stock of supplies.

We next took up several special agency propositions as follows: Prest-O-Lite gas tanks and supplies, tires, and electric horns.

The Prest-O-Lite gas-tank agency can be secured by making a cash deposit of six dollars on each tank kept in stock, from four to six being sufficient to handle the exchange business for about a dozen cars. These tanks sell complete for eighteen, twenty-five, and thirty-five dollars, paying a profit of fifty per cent or better.

There is then a continuous profit from the exchange. You simply exchange tanks, tak-

ing the customer's empty tank and giving him a full one, charging for the gas it contains. The price is usually governed by that in the city nearest you, which is usually sufficient to pay a good profit. We usually hold the empties till we have two or three, and then ship them back to the nearest supply station, receiving refilled tanks in return.

By this arrangement the customer never has a worn-out tank, and never has to buy a new one, for it matters not what condition the tank is in when he returns it, he gets one in exchange that is in perfect condition.

In regard to tires we have the agency for Goodyear and Diamond. But before getting a tire agency I would advise to inquire of the various car owners which tire they prefer, and then get the agency for the two or three brands most generally used. I would advise the same policy in regard to spark plugs. While the percentage of profit on tires is not so large as on other accessories, yet the profit on an average pair of tires ranges from ten to fifteen dollars. Not at all bad considering the fact that we have no money invested, and no stock to carry, as we sell tires only on special order.

We carry the Newtone electric horns, as they consume only half the amount of current that most of the horns do, and also cost less; they sell for only twenty dollars, and give practically the same sound as the Klaxon, which sells for thirty-five.

SUPPLYING.

It is also to the advantage of those who handle supplies to have agency membership in the Tourists' Club of America. If you join you will be listed in their year-book as a depot for supplies. They furnish a large shield, bearing the Club's emblem, to hang in front of your building, to show tourists that you carry automobile supplies. Then all members going to the home office for routes through any part of the country will be given a regular drawn-up route showing the places where supplies can be secured, and should the trip lead them through your town, your store will be given as the place to stop for gasoline, oil, and grease,

also for repairs. And after a tourist is once supplied by you with reliable goods, you may be sure that he will give you another call when in your vicinity. For the traveler likes to know where he can be supplied, and will not look for a new place when passing that way again.

In regard to buying supplies, we deal with several supply houses most convenient to us, buying our general line from them with the exception of goggles. These we obtain from the American Standard Thermometer Co. We find that they make the best line, also have better prices than the supply houses have.

Now after reading thus far, and without looking into the matter, you may conclude that it is a line too extensive for the average druggist to put in, but I assure you that such is not the case. For by buying in moderate quantities you will find that you can carry a nice assortment for about one hundred dollars. In fact, some supply houses will give you a nice show-case with a hundred dollar assortment.

THE PROFIT.

The profit on the general line runs from fifty to over one hundred per cent, and the number of times your stock is turned in a year depends entirely upon the management, as it does on every other line you sell. You must of course know your goods to sell them.

There are few tourists who pass our store without stopping to make inquiries as to routes and road conditions, on which subjects we try to keep posted.

Others who know their routes stop for cool drinks. And by keeping the auto supply case in a prominent place near the front of the store, where it easily attracts the eye of the traveler, we usually make a sale large or small before they leave the store. The man is not born who remembers every necessity when packing for an extended tour.

Finally, while we realize that all stores are not so well situated to handle the tourist trade, yet any drug store can have the local business and will necessarily get some of the traveling patronage.



DOLLAR IDEAS

A MOVABLE SEAT.

J. Wilber Tudor, Homer, Ill.: I submit a photograph of a "strength saver" employed in the store where I work. The illustration tells the story better than words. We believe in making conditions pleasant for all kinds of work, humble or not, and have evolved this idea.

The device is simply an old castoria box mounted upon small wheels such as the children have on their roller skates. The wheels cost us five cents each; the screws holding them to the box also cost five cents, making



the whole affair cost a quarter plus our work in assembling it. The materials can be purchased at any hardware store.

Since making this one we have seen similar wheels with rubber tires. For finer floors these might be better, but we would prefer the iron wheels without tires.

We find plenty of uses for the device. It is a wonderful saver of back and leg muscles when cleaning the sides and end of our floor cases. Other uses may readily be found, too, depending upon the demands of the user.

ORANGE RICKEY: A GOOD SODA DRINK.

J. C. Arthur St. James, Fort Morgan, Colorado: For the last few soda seasons I have had splendid success with a drink made with fresh limes and orange syrup. I call it Orange Rickey and sell it for 5 cents. It is made as follows:

An ounce of orange syrup is freshly prepared from the grated peel and juice. You can't buy it. Squeeze out a half or a whole

lime as you prefer. A half is really enough, and be sure to add the squeezed lime, too. Next add a scoop of chipped ice to the lime and orange and fill the glass with carbonated water. Serve with a straw.

The name, of course, is a nickname, borrowed from the other famous rickey, and was first served in a New York store in 1898. There have been many fountain rickey drinks concocted, but this is the original soda drink to which the name is applied.

No other flavor blends with the fresh lime as does a good fresh orange syrup. Until late years it has been impossible to get the fresh fruit at a reasonable price in interior towns, but a firm in Texas and others in Arkansas fill orders for as many hundred per week as are needed at the year-round price of 60 cents a basket, averaging some 120 to the basket. Express is not high and the fruit is shipped quickly from its source, Old Mexico. Recent clinical tests prove lime juice of great value in typhoid. And we must not forget the "Lime Juicers" of Captain Marryat's stories where each English ship serves a certain ration of lime juice in the tropics to prevent scurvy. For an all-round, healthy, cooling summer drink, it's a winner. A special scissors-shaped squeezer is listed by fountain supply houses for limes.

TO SEE WHETHER A BOTTLE IN A CARTON IS BROKEN OR NOT.

N. E. Truman, Bainbridge, N. Y.: Manufacturers often put bottles of liquid medicine up in sealed cartons. When a package of this kind is received with its outer cover damp but unbroken, the retailer has the problem of determining the exact nature of the damage. The injury may consist of a broken bottle or loosened cork, with the resulting loss of contents, or it may be merely superficial—i.e., liquid may be spilled on the carton from some external source. In the latter case, to break open the carton would in some instances render the package unsalable.

A simple method of finding the nature of the damage is to balance the package against another uninjured one of the same kind of goods. If the damp carton is the heavier, the damage is superficial and the contents intact. If it is of equal weight or lighter, some of the contents of the enclosed bottle has been spilled.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

IS IT ANY WONDER?

To the Editors:

This is a sample page of the expense account of a certain druggist who shall be nameless:

2. Exp. 35c, Adv. \$2.50, Fount 60c.....	\$ 3 45
3. Sal. \$62.50, Sal. \$30.00.....	92 50
4. Ice \$16.00, Frt. \$1.47.....	17 47
Stamps \$1.25, Exp. 15c.....	1 40
5. Adv. \$15.25, Tel. \$5.00.....	20 25
6. Light \$4.50, Ice Cream \$19.00.....	23 50
7. Plumbing 50c, Laundry \$1.05.....	1 55
8. Fount 55c, Exp. \$1.20.....	1 75
9. Sal. \$20.60, Fount 15c.....	20 75
10. Stamps \$2.10, El. Light \$10.65.....	12 75
11. Rent \$60.00, Gasoline \$3.00.....	63 00
12. Manola 75c, Freight \$1.20.....	1 95
14. Fount \$1.05, Freight \$1.40.....	2 45
15. Salt \$1.20, Freight 45c.....	1 65
16. Sal. \$92.50, Exp. 85c.....	93 35
17. Express \$3.30, Gasoline \$4.50.....	8 80
18. Laundry 75c, Freight 40c.....	1 15
19. Fountain \$1.85, Exp. 65c.....	2 50
20. Fountain 40c.....	40

Let me call your attention particularly to the italicized items. The fountain charges were for such things as lemons and crackers. The gasoline mentioned was sold to a doctor for his automobile. These are only a few things which this man charges to the expense account, and then he wonders why it is so large!

Nice way to keep business records, isn't it?

THE CLERK.

AN ADVERTISING SUGGESTION.

To the Editors:

Here is an idea which may help druggists sell books, and, by the way, there might be quite a lot of money in books as a side-line if the druggist chooses wisely and advertises judiciously. Passing a well-known book store in New York recently, I noticed a very peculiar contrivance in the window. Upon a closer examination I saw that it was a sort of sheet-iron affair bolted and riveted together. Plainly it was some kind of a machine. My curiosity was aroused. On the contrivance was a neatly painted placard announcing: "This is John

Rawn's machine with which he was going to make millions for himself at the expense of the public." Piled high around the "machine" were copies of a book entitled "John Rawn." Some of these days I am going to find out what kind of a scheme John Rawn had in view. Anyway, the idea suggests that a handy druggist, his local tinsmith, or carpenter might arrange many window displays which through originality, appropriateness, and singularity would attract attention and sell goods.

New York City.

INKERMAN BAILEY.

HE KNEW WHAT HE WANTED!

To the Editors:

Here is one of the experiences we had last Easter. We were first handed this letter:

*The Gipsy
bluse let my
boyes have
a wotter surange
not one your largest
a mullen size*

We filled this order by supplying a two-quart fountain syringe. Later in the day the syringe was returned with the following note:

*This is not what i want
i want one with a
bump what suck the
wather*

Accordingly I selected the best syringe in the shop with a fine large "bump" in the middle of it, and sent it on its way rejoicing!

Oh, I nearly forgot to mention it, but I want to say that I take the BULLETIN and am likely to be a subscriber as long as I am a druggist!

Bangs, Texas.

J. C. GIBSON.

SUN CHOLERA MIXTURE.

To the Editors:

On page 130 of the March issue of the BULLETIN OF PHARMACY I notice that "A. H. F." wishes the formula of the old "Sun Cholera Mixture." An uncle of mine was one of the physicians to suggest the formula, but I always believed it to be named from the *Baltimore Sun*, a paper edited by A. S. Abell.

I supposed, too, that it originated in the South. But perhaps I have been misinformed. At all events, I submit a copy of the formula as I received it from my relative and trust you will print it for the benefit of "A. H. F." and others:

Tincture of capsicum..... 1 fluidounce.
Tincture of opium..... 1 fluidounce.
Tincture of rhubarb..... 1 fluidounce.
Essence of peppermint..... 1 fluidounce.
Spirit of camphor..... 1 fluidounce.

Mix well.

Dose: 15 to 20 drops in wineglass of hot or cold water. Repeat every 15 or 20 minutes if desired.

Stamford, Ct. MRS. L. B. GAYLOR.

AN AMUSING PRESCRIPTION.

To the Editors:

Here is a prescription which we received a short time ago:

Glycerin 1 ounce.
Bay rum ½ pint.
Marlax or malrax..... 1 ounce.
Alcohol ½ pint.
Pharmacopœia ½ ounce.
Castor oil..... ½ ounce.

If it isn't too much trouble git the above.

One or two of the ingredients rather amused the men in the store.

RED CROSS DRUG STORE.

Chatham, Ontario.

"THE CROWNING OF THE HOUSE."

To the Editors:

I certainly think, as I have written you before, that the BULLETIN OF PHARMACY has grown better every year since its origin. From Palmer to Oldberg to Helfman to Mason has been just one continued, endless chain of improvement, until now it has reached "Le coronation du Maison," as Napoleon III. said—with apologies to the spelling of "Maison!"

Chicago, Ill.

W. BODEMANN.

THE ENGLISH LANGUAGE.

To the Editors:

Here is a man who wanted succus alterans.

Sucker Salts herb

His method of spelling it certainly ought to make him famous! Don't you think so?

THE ROBINSON DRUG CO.

Colorado Springs, Colo.

FLORAL DEPARTMENT.

Please find enclosed my subscription for the current year. I fancy this is the sixth I have sent you, and in doing so I would like to express my appreciation of your paper as I do not know of a better one.

S. B. BROWNELL.

Newtown, Hobart, Tasmania.

It is without doubt the best of its kind I have ever seen, and any druggist is making a mistake who does not take the BULLETIN OF PHARMACY. As for me I never intend to miss another copy.

GLENN C. STURDIVANT.

Senatobia, Mississippi.

Yes, I want the BULLETIN. You send it on till I tell you not to, and see that you get the dollars. I find it excellent reading, and it lets one see what is going on outside these Islands of ours.

FRED WALKER.

Castle Douglas, Scotland.

I get more useful information, and entertainment as well, from the BULLETIN than I do from several other magazines put together.

Dallas, Texas.

CORNELIUS BEUKA.

Your journal contains more valuable information for the clerk and proprietor than any other published.

Charlotte, N. C.

NEWMAN A. SMITH.

I get more ideas from your journal than from any other which comes to the store.

Gilliam, Mo.

W. H. LAND.

Here goes my one dollar bill, which pays for the best drug journal I have ever read!

Chunkey, Miss.

G. E. THRASH.

I take half a dozen journals, but yours is decidedly the best.

E. D. HEINE.

Vernon, Texas.

The BULLETIN is the snappiest pharmacy journal published!

JAMES L. TUOHY.

Salem, N. J.

THE SODA FOUNTAIN.

SELECTED FORMULAS.

CHOCOLATE FOOD.

Fill an 8-ounce bell glass two-thirds full of vanilla ice cream; then add $\frac{1}{2}$ ounce of chocolate syrup and one teaspoonful of Horlick's malted milk; stir until thoroughly mixed. Sells for 15 cents.

SPA FIZZ.

Orange syrup, 1 ounce; strawberry syrup, 1 ounce; juice of lemon; cracked ice, $\frac{1}{4}$ th glassful; put into a glass; shake and fill with carbonated water, coarse stream. Decorate with fruit.

BANANA SPLIT.

A split banana is still selling well as the base of fancy sundaes. There is a good reason, for the banana sundae is certainly delicious when properly prepared. Especially is this true when the bananas are fully ripe and mellow. If you want your bananas to be in good condition, keep them in a dark, cool place. Here is a combination that is excellent, and to contrast it from your others, call it

"BANANA BEST."

On a split banana put a No. 20 cone each of vanilla ice cream, orange water ice, and strawberry ice cream in the order mentioned. Over the vanilla cream pour some chocolate flavor Velvet marshmallow dressing. Over the strawberry ice cream pour a small ladle of "Liquid" crushed pineapple. Top each cone with a cherry. Put a green cherry on each end cone, and a red cherry on the center cone. If you have no green cherries, use all red ones. Then decorate with whipped cream or Velvet marshmallow so that it will look artistic.

CHOCOLATE ECLAIR.

Have you ever tried serving them at your fountain? They can be served in a number of ways, and will be found good sellers. The empty eclair shells can be purchased from any wholesale baker. Take one of the shells and cut it so that the top lifts like a lid. Put two No. 20 mounds of vanilla ice cream into the shell, and spread out with a spoon so that the bottom is covered. Place the eclair on a small platter or other oblong dish, and pour over it a ladle of heavy chocolate syrup, or chocolate marshmallow dressing. This can be sold for 10 cents at a good profit. A better plan, where you can secure 15 cents for them, is to fill the shell with a parfait mixture. This is prepared by putting a No. 10 cone of ice cream into a mixing glass and adding a ladle of whipped cream or Velvet marshmallow cream and mix them thoroughly. Cover the shell with chocolate syrup as above. Another method is to make a filling by mixing chocolate ice cream and whipped cream, and then covering the eclair with whipped cream or Velvet marshmallow cream in place of the chocolate syrup.

The eclair shell may be filled with whipped cream or Velvet marshmallow cream and then a small quantity

of chocolate syrup or chocolate marshmallow dressing. This is especially nice to serve with hot chocolate. After a little practice these can be prepared quite quickly.

MOORISH MILK SHERBET.

Into a mixing glass draw one-half ounce each of strawberry, vanilla and pineapple syrup. Add one-quarter glass of ice and fill with milk. Shake thoroughly and strain into a twelve-ounce glass.

YARBA CHOCOLATE.

Into a mixing glass draw one ounce of chocolate syrup, one-half ounce of orange syrup and two ounces of sweet cream. Add one-quarter glass of fine ice and fill with milk. Shake thoroughly and strain into a twelve-ounce glass.

SOUTHERN FRAPPE.

In a mixing glass draw one ounce of chocolate syrup, one-half ounce of coffee syrup, add one-half ounce of raspberry juice and one-quarter glass of fine ice. Fill with milk, shake thoroughly and strain into a twelve-ounce glass.

YUM-YUM SHAKE.

In a mixing glass draw one ounce of cherry syrup, one-half ounce of orange syrup, add a number twelve scoop of vanilla ice cream and fill with milk. Shake thoroughly and pour into a twelve-ounce glass without straining.

CHOCOLATE BOUCHE OR BOUSSHEA.

Into a mixing glass draw two and one-half ounces of hot chocolate syrup, add one-quarter glass of fine shaved ice, fill with milk, shake and strain into a twelve-ounce glass and top with whipped cream.

COFFEE BOUCHE.

Pour one and one-half ounces of coffee extract into a mixing glass, add one ounce of simple syrup or two teaspoonfuls of sugar and shake thoroughly, then strain into a twelve-ounce glass and top with nutmeg.

FAIRBANKS V. P.

Into a mixing glass draw one ounce of grape syrup and one-half ounce of raspberry syrup, add one-quarter glass of fine ice and fill with milk. Shake and strain into a twelve-ounce glass and top with nutmeg.

BON BON.

Into a mixing glass draw one-half ounce each of pineapple, strawberry, and vanilla syrup, add a portion of ice cream and fill with milk. Shake thoroughly and pour without straining into a twelve-ounce glass.

MIXED FRUIT SHAKE.

Into a mixing glass put a small ladle of crushed pineapple, one of crushed cherry and one of crushed strawberry, and fill with ice cold milk and shake thoroughly, then pour into a twelve-ounce glass. It is very nice with a portion of ice cream floated on top.

SOUTHERN MILK SHAKE.

Into a mixing glass draw three-quarters of an ounce each of pineapple and vanilla syrup. Add one-quarter glass of fine ice and fill with milk. Shake, strain into a twelve-ounce glass and sprinkle with powdered cinnamon.

MINERAL MILK.

Into an eight-ounce glass draw three ounces of any mineral water and fill with milk and mix.

SELTZER AND MILK.

Into an eight-ounce glass draw four ounces of seltzer and fill with milk and mix.

VICHY AND MILK.

Into an eight-ounce glass draw four ounces of vichy and fill with milk and mix. This is a good morning drink.

QUEEN SHERBET SYRUP.

To two pints of pineapple syrup add two pints of vanilla syrup and two pints of strawberry syrup, and mix thoroughly.

SPECIALS FOR THE SODA FOUNTAIN.

George Galane, employed in Menk's pharmacy, Newark, writes interestingly in *The Soda Fountain* of his work as soda dispenser. In a recent issue of that journal he said:

"At present I am having my spring opening, wherein I display a notable assortment of fresh fruits, bananas, strawberries, pineapples, oranges, etc., of the best quality procurable. Then, pasted on the large back mirrors of the fountain, the windows, and the doors leading from the street to the fountain I have many sign strips telling what we have and what we do. We believe in signs here so people will know just what we have to offer in the way of quality, service, and goods. And, in passing, I might say that we treat all customers alike, so that every patron is satisfied. We insist upon cleanliness, order, and neat appearance of everything about the fountain.

"Now, I have two specials every week which are being called for every day in the week. The specials this week are:

"*Strawberry Sponge*—sponge cake, fresh strawberries, ice cream and whipped cream, a winner at 15 cents; and

"*Fresh Fruit Salad Sundae*—fresh bananas, cut; strawberries, orange and cherries, chopped and mixed. This is a good seller at 10 cents.

"I would like to tell you and my brother dispensers of something that happened to me recently. A man came in to me at the soda fountain and asked for something with 'steam behind it.' I gave him an egg malted milk. He asked the name of the drink. I told him 'egg chocolate malted milk,' and he expressed his appreciation of it. Then I gave him a 15-cent check. 'I reckon you have made a mistake and have given me the wrong check,' said he. I told him the price was 15 cents, to which he replied, 'I can buy a small steak and a cup of coffee for that money.'

"He then said it was a dodge of the 'city folks' in trying to rob him, and turned to go. Seeing the bananas, pineapples, oranges, etc., with which the fountain was decorated he asked what I did with them, or if the store was a fruit store. I explained why and how we used them, and then he 'reckoned we did not have any meat.'

"'Oh, yes we have,' I answered, and produced a large ham from which I had been cutting slices for

sandwiches—and he almost collapsed. Then he shook hands and said, 'The next time I come I'll buy another drink.'

HOMOGENIZED CREAM.

"Homogenized cream," says the *International Confectioner*, "is rapidly taking its place in the ice-cream trade. It is put through the homogenizer, a machine that breaks up the globules in the cream, giving it a thicker consistency, without the addition of a filler or any substance whatever. Merely the structure of the cream is altered. It is impossible to churn the cream, hence no butter will appear in the ice cream. From the view-point of economy, it is much more reasonable in price than the raw cream of the same consistency, though not as rich in butter-fat, yet it is a fact that if a large amount of butter-fat is present in ice cream it is not as digestible as when made with a comparatively small butter-fat content. Ice cream can be "too rich." But the consumer thinks it is caused by too much sugar, when the richness is directly due to the cream, not the flavoring. It will pay those who do an extensive ice-cream business to look into the merits of this new product. By it the consistency of 40-per-cent cream can be produced from 20-per-cent cream. Like all innovations it requires time to introduce it, though in Europe it is well known.

"Two ice-cream formulas for vanilla, each giving 10 gallons, the proportion of milk and cream being the only difference:

Five and one-quarter pounds sugar.
Ten quarts cream (40 per cent).
Eight quarts milk.
Two quarts condensed milk.
Four ounces gelatin.
Four fluidounces vanilla extract.

Five and one-quarter pounds sugar.
Sixteen quarts cream (20 per cent).
Four quarts condensed milk.
Four ounces gelatin.
Four ounces fluid vanilla extract."

CHIPPED GLASSWARE.

E. F. White, writing in *The Soda Fountain*, gives some pointed talk on the subject of chipped glassware. He says:

"Because glasses represent a considerable part of the general fountain expense, there is a tendency to continue to use a glass after the rim has become chipped. This is a good example of false economy. Insist that your dispensers be as careful as they can in handling glasses. Don't forget, however, that they chip very easily and no man can avoid some breakage. The only wise thing to do is to discard a glass just as soon as you notice that it is chipped. The appearance of such a glass upon the counter is decidedly bad. It is also dangerous, for some one is likely to cut himself, not seriously perhaps, but sufficiently to cause one to think twice before going a second time to a fountain where he had such an experience.

"Another dangerous thing about a chipped glass at a fountain is that your dispensers are liable to cut themselves when washing them, especially when they are hustling and trying to give good service. Don't let them run any unnecessary chances.

"Have you ever noticed the expression on a customer's face who was turning a chipped glass around

in a holder, trying to find a smooth edge to drink from? If you ever do, you will understand why this advice is given. It may cost something to discard chipped glasses; but it will cost more to keep them in service.

"It is not always necessary to throw them away—they can be used at home where a knowledge of their condition will mean carefulness. If you do not care to use them, you no doubt will find some among your clerks who will be glad to."

AN ATTRACTIVE SODA MENU.

R. L. McDonald, proprietor of the pharmacy in the Minahan Building, Green Bay, Wis., prints a soda menu for his fountain. On the cover appears the statement, "No soda like McDonald's. It changes a frown to a grin." The cover pages are a heavy, brown stock. The inside pages are buff colored.

On the first page are mentioned the different crushed fruits and sundaes. The two inside pages read:

There is a treat in store for the unfortunates who have never tasted it. The flavor is inimitable.

JERSEY CREME 5c
Lemon 5c
Orange 5c
Claret 5c

PHOSPHATES

Cherry 5c
Lime 5c
Egg 10c
Jersey Creme 5c

ICE CREAM SODA

As Cold as Charity

Chocolate 10c
Raspberry, 10c
Maple 10c
Sarsaparilla 10c
Jersey Creme 10c
The Best, Cleanest and Purest Fountain Drinks in the City.

LEMONADES

Plain 10c
Seltzer 10c
Jersey Creme 15c
Egg 15c
Claret 15c
Grape Juice 15c

FRAPPES

Every woman suffragette votes that they are the most delicious flavors that ever tickled a feminine palate.

Chocolate 10c
Maple 10c
Strawberry 10c
Jersey Creme 10c
Raspberry 10c
Pineapple 10c
Lemon 10c
Sarsaparilla 10c

MISCELLANEOUS DRINKS

Grape Juice 10c
Orangeade 5c
Jersey Creme 5c
Root Beer 5c
Iron Brew 5c
Gingerale 5c
Coca Cola 5c

ALWAYS AN ASSORTMENT OF FRESH CANDIES

As the menu says, each drink is "made with that touch of loving care." Mr. McDonald bases the success of his fountain upon a superior quality of goods and prompt service.

TO IMPROVE CHOCOLATE CREAM.

Chocolate ice cream is smoother if the chocolate is boiled up with milk instead of making a syrup with water and boiling it in this. In the first place, the least water in ice cream, the better, for it serves no good purpose and has a tendency to cause coarseness besides lessening the keeping qualities. If well stirred with a wooden paddle the milk and chocolate may be boiled on an open fire; first bring the milk and sugar to a boil, set off the fire and add a dipperful of the milk to the chocolate, stirring to a thick, smooth paste; then add the rest of the milk gradually, always stirring, and when all is mixed place it back on the fire to boil a short

while. If an all-cream ice cream is being made, use four quarts of the cream instead of milk, and if it threatens to separate add a pinch of bicarbonate of soda, which will prevent it. In all ice cream, any part of which is heated or boiled, that part should be thoroughly chilled before mixing with the rest of the batch, or before putting it in the machine, else there is sure to be butter in the finished batch.

HE WANTED A NAME FOR HIS SODA PRODUCT.

There is a druggist down in Madisonville, Ky., who got up a new soda concoction that he thought was pretty good, and he wanted to bring it to the attention of people. He therefore offered a prize for the best name for it. We suspect, however,

ONE EGG,
ONE BANANA,
ONE LADLE OF ICE CREAM,
MILK,
FLAVORING.

Whipped with an electric machine
and nutmeg added.

Sounds good, doesn't it? It is good,
and all for

10c.

—Try It—

But we haven't a name. Here's
our offer:

To the one who suggests the
catchiest name for this delicious
egg drink we will give

\$1.00

worth of Drink Checks.

SORY'S DRUG STORE

Madisonville, Ky.

that he didn't need help from the public so much in this particular as he wanted to get everybody talking about the drink. He thought a prize scheme was one of the best ways of getting people stirred up. Hence the accompanying ad. inserted in the local newspapers.

TWO NEW ONES.

CENTRAL PARK PHOSPHATE.

Into a ten-ounce glass draw one ounce of pineapple syrup, and three-fourths of an ounce of blood orange syrup. Add a couple of dashes of phosphate, and fill with carbonated water.

FRUITADE.

Into a twelve-ounce glass draw one and one-half ounces of pineapple syrup. Into this squeeze the juice of half a lemon, and one-half a small orange. Fill one-third full with fine ice, and the balance with carbonated water, mix and decorate with fruit. This may also be served with plain water.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Show-card Writing.—

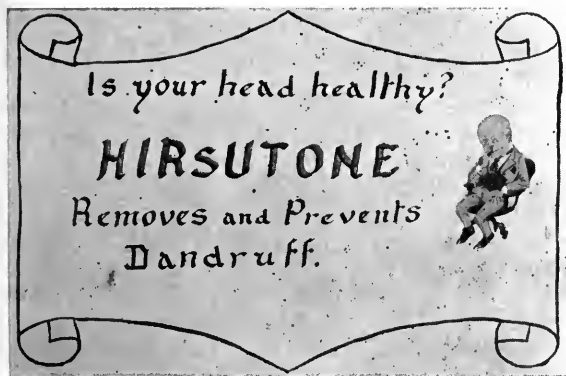
In the December BULLETIN, 1910, on page 504, Roy S. Warnack had a contribution telling how easy it was for even an amateur to make nice show cards. Moved by this article, W. H. Land, of Gilliam, Mo.,



One of Mr. Land's cards.

undertook to make a few signs. In the accompanying illustrations may be seen the fruits of his first effort.

The pictures used in these signs are cut-outs from magazines, an idea borrowed from the BULLETIN. Mr.



Another of Mr. Land's cards.

Land says that the cards, aside from inducing many sales, have given him a local reputation as a show-card writer. The inks are made after formulas suggested in this journal.

A Druggist's Clever Trade-mark.—

Otto Kurz is a successful druggist at 752 Michigan Avenue in this city. Notice the man's initials—O. K. He has been clever enough to take advertising advantage of this happy circumstance, and he calls his place the "O. K. Pharmacy." He also gets out an O. K. Cough Syrup, O. K. Headache Powders, O. K. Sarsaparilla, and a whole line of O. K. goods in general.

Not bad, is it? Now he writes us that he has been reading the BULLETIN OF PHARMACY about ten years and that our journal is O. K.!

An Unusual Ad.—

J. W. Stutts, of Florence, Alabama, informs us that he was recently a candidate for public honors. Just after the primary election, and early in the campaign, he ran an ad. in the weekly papers: "Vote for J. W. Stutts." Of course, the voters were curious to know what this druggist could want of the voters. Mr. Stutts followed his announcement up by sending every voter and others in the county the following card:

VOTE FOR J. W. STUTTS

I hereby announce my candidacy for more business in 1912, subject to your patronage and influence. MY PLATFORM: The Purest and Best Drugs and Chemicals that hard cash will buy. The best of everything in our line—Heaping measure, Full weight, Prompt attention, Right prices, a Square deal. Won't you join hands with us on this platform and help us make 1912 a banner year? We are counting on you.

"Get the Habit"

J. W. STUTTS

[OVER]

The back read:

VOTE FOR J. W. STUTTS

"EAS-IT"

The Wonderful Headache Remedy

Guaranteed to cure any form of headache in thirty minutes or money refunded. No dope in it. Fill out coupon and present at our store for free sample bottle. Only a few left. Come quick.

Name

Address

[OVER]

This scheme not only proved a bit of good general advertising but helped the sales of "Eas-It" which Mr. Stutts was then putting on the market. Mr. Stutts received many compliments on this little plan and recommends it to others who may care to try it.

DURING a recent epidemic of spinal meningitis in Dallas, Secretary Paul Casey of the Health Department went with a sanitary inspector to raise the quarantine on a negro shack and remove the big green sign.

An old negro came to the door.

"Now sholy, boss, you'all ain't gwine ter take that sign down?" he asked.

"Yes, we are going to remove the quarantine," said Casey. "Don't you want it removed?"

"No, sah, boss, 'cause dar ain't been nary collectah 'round heah sense dat sign was put up."

The quarantine remained.—*Houston Post.*

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Chewing Gums.

A. B.—The making of chewing gums is by no means the simple operation which it seems to be. Much experience in manipulation is necessary to succeed, and the published formulas can at best serve as a guide rather than as something to be absolutely and blindly followed. Thus, if the mass is either too hard or soft, change the proportions until it is right; often it will be found that different purchases of the same article will vary in their characteristics when worked up.

Chicle gum is purified by boiling with water and separating the foreign matter. Flavorings, pepsin, sugar, etc., are worked in under pressure by suitable machinery. Formulas:

- (1) Gum chicle1 pound.
Sugar2 pounds.
Glucose1 pound.
Caramel butter1 pound.

First mash and soften the gum at a gentle heat. Place the sugar and glucose in a small copper pan; add enough water to dissolve the sugar; set the mixture on a fire and cook to 244° F.; lift off the fire; add the caramel butter and lastly the gum; mix well into a smooth paste; roll out on a smooth marble, dusting with finely powdered sugar, run through sizing machine to the proper thickness, cut into strips, and again into thin slices.

- (2) Chicle6 ounces.
Paraffin2 ounces.
Balsam of tolu2 drachms.
Balsam of Peru1 drachm.
Sugar20 ounces.
Glucose8 ounces.
Water6 ounces.
Flavoring, enough.

Triturate the chicle and balsams in water; take out and add the paraffin, first heated. Boil the sugar, glucose, and water together to what is known to confectioners as "crack" heat, pour the syrup over the oil slab, and turn into the gum mixture, which will make it tough and plastic. Add any desired flavor.

- (3) Gum chicle122 parts.
Paraffin42 parts.
Balsam of tolu4 parts.
Sugar384 parts.
Water48 parts.

Dissolve the sugar in the water by the aid of heat and pour the resultant syrup on an oiled slab. Melt the gum, balsam, and paraffin together and pour on top of the syrup, and work the whole up together.

- (4) Gum chicle240 parts.
White wax64 parts.
Sugar640 parts.
Glucose128 parts.
Water192 parts.
Balsam of Peru4 parts.
Flavoring matter, enough.

Proceed as indicated in No. 2.

Polishing Cloths.

E. R. B. asks: "Can you give me a formula for making polishing cloth for cleaning silver, copper, brass, etc.?"

The so-called polishing cloths are made in different ways. The simplest is to dissolve 1 ounce of oxalic

acid in a gallon of water, and sift into the solution one pound of whiting. Saturate pieces of Canton flannel, about 18 inches, in this liquid, which is to be kept well stirred, wring out the cloth somewhat, and allow it to dry. Then smooth out the cloth, fold it, and insert it in an envelope.

Another plan is to use a mixture of 2 parts of white Castile soap, 1 part of jeweler's rouge, and 20 parts of water. Dissolve the soap in the water by the aid of heat, adding water from time to time if necessary, and then incorporate the rouge. Impregnate pieces of woolen cloth, which may be red, in the same manner as the preceding. Instead of the cloth, chamois leather may be used, which will prove more durable for many purposes.

Sometimes two kinds of cloths are used in conjunction. The first is impregnated with a mixture of flour of emery 1 part, soap 2 parts, and water 10 parts; the second with a mixture of tripoli or jeweler's rouge 1 part, soap 2 parts, and water 10 parts. The first cloth is used as a scourer to remove the oxidized surface, while the second cloth is the polisher proper.

Restoring Automobile Tops.

B. R. wants a polish for automobile tops—presumably the rubber ones. We do not know the composition of such a preparation. Suppose you try a carriage top dressing. First try it experimentally on a small part of the auto top. Carriage tops that have faded and become gray can be restored by washing with a solution of:

- Nutgalls4 ounces.
Logwood1 ounce.
Copperas1 ounce.
Clean iron filings1 ounce.
Sumach berries1 ounce.

Put all but the iron filings and copperas in one quart of the best white wine vinegar, and heat nearly to the boiling point; then add the copperas and iron filings. Let them stand for twenty-four hours, and strain off the liquid; apply with a sponge. This is equally good for restoring black cloths.

To restore enamel leather carriage tops, first wash the top with soft water and Castile or crown soap to remove dust, dirt, etc., using a sponge, and then scrub with a moderately stiff brush, cleanse with clean water, and dry with chamois leather. Never apply any kind of oil or top dressing without first cleaning the leather.

An enamel for carriage tops is: Asphaltum, 150 parts; boiled linseed oil, 3 parts; turpentine, 33 parts; benzine, 20 parts. Melt the asphaltum in the oil and add the thinners.

Licorice Preparation for Quinine Mixtures.

G. J. C.—The following preparation is used for disguising the taste of quinine:

- Select licorice root, cut and slightly
bruised2½ ounces av.
Water of ammonia4 fluidrachms.
Glycerin1 fluidounce.
Water16 fluidounces.

Macerate for twenty-four hours, strain, boil for ten minutes, filter, and evaporate at gentle heat until reduced to six fluidounces.

Now add to this evaporated infusion:

- Simple syrup6 fluidounces.
Alcohol4 fluidounces.
Spirit of orange2 fluidrachms.
Oil of cinnamon (Ceylon)2 drops.

No acid should be used with this preparation because it will dissolve the quinine and make its bitter

taste more perceptible, and at the same time liberate the glycyrrhizin from its combination with ammonia and render it insoluble, and therefore valueless for the purpose of disguising or modifying a bitter taste.

Shoe Polishes.

B. R.—Here are several formulas for shoe polish:

Marseilles soap	122 parts.
Potassium carbonate	61 parts.
Beeswax	500 parts.
Water	2000 parts.

Mix and boil together with occasional stirring until a smooth, homogeneous paste is obtained; then add, a little at a time, and under constant stirring, the following:

Rock candy powdered.....	153 parts.
Gum arabic, powdered.....	61 parts.
Ivory black	1000 parts.

Stir until homogeneous; then pour, while still hot, into boxes.

The following makes a very brilliant and durable black polish for shoes:

Boneblack	40 parts.
Sulphuric acid	10 parts.
Fish oil	10 parts.
Sodium carbonate crystal.....	18 parts.
Sugar, common brown, or molasses.....	20 parts.
Liquid glue, prepared as below.....	20 parts.
Water, sufficient.	

Soak 10 parts of good white glue in 40 parts of cold water for four hours, then dissolve by the application of gentle heat, and add 1.8 parts of glycerin (commercial). Set aside. Dissolve the sodium carbonate in sufficient water to make a cold saturated solution (about 3 parts of water at 60° F.), and set it aside. In an earthenware vessel moisten the boneblack with a very little water, and stirring it about with a stick, add the sulphuric acid, slowly. Agitate until a thick dough-like mass is obtained, then add and incorporate the fish oil. Any sort of animal oil, or even colza, will answer, but it is best to avoid high-smelling oils. Add a little at a time, and under vigorous stirring, sufficient of the saturated sodium carbonate solution to cause effervescence. Be careful not to add it so freely as to liquefy the mass. Stir until effervescence ceases, then add the molasses or sugar—the first if a soft, damp paste is desired, and the latter if a dryer one is wanted. Finally, add a little at a time, and under constant stirring, sufficient of the solution of



PHARMACY FRATERNITY HOUSES.—This is one of the rooms in the house of the Delta Chapter of the Kappa Phi Fraternity. The Delta Chapter is located in the Departments of Pharmacy and Medicine in the University of Maryland at Baltimore, and the Chapter house is at 1415 West Fayette Street. Both this cut and the other one were courteously loaned us by Dr. A. R. Bliss, Jr. editor of "The Mask," the official organ of the fraternity.

glue to make a paste of the desired consistency. The exact amount of this last ingredient that is necessary must be learned by experience. It is a very important factor, as it gives the finished product a depth and brilliancy that it could not otherwise have, as well as a certain durability, in which most of the blackings now on the market are deficient.

Tincture of Vanilla.

R. I. submits the following query: "Please publish a formula for tincture of vanilla or essence of vanilla that would be a good seller and at the same time meet the requirements of the food and drug laws."

If you wish to call the preparation "Tincture of Vanilla" you must follow the official formula given in the Pharmacopœia on page 484. If you care to supply a cheaper product, you can offer the compound tincture of vanillin of the National Formulary. Flavoring preparations containing vanillin and coumarin are legal if properly labeled. They may be sold as "vanillin extract" or "Vanilla Flavoring made from Chemically Pure Vanillin." The N. F. product may be called compound tincture or compound essence of vanillin, or vanillin flavoring, or some such title. Vanilla extract, by the government ruling, is the flavoring extract prepared from vanilla bean with or without sugar or glycerin, and containing in 100 Cc. the soluble matters from not less than 10 grammes of the vanilla bean.

Chicken Cholera Remedy.

T. B. K. wants a formula for a chicken cholera remedy. Here are several found in the literature:

- (1) Sulphuric acid 1 fluidounce.
Sulphate of iron..... 16 ounces.
Water 1 gallon.

Mix. Add 1 ounce of this mixture to a pint of water, and supply in place of water to drink. Or, mix with meal or other food.

(2) A remedy promulgated by the Department of Agriculture is alum alone, giving 3 or 4 teaspoonfuls of alum water daily, and mixing strong alum water with the feed (corn-meal). This is said to cure the very worst cases.

(3) The following remedy and treatment have been proposed:



PHARMACY FRATERNITY HOUSES.—The two engravings on this page represent chapter houses of the Kappa Phi Fraternity of the United States of America. This illustration shows the house of the Phi Chapter, which is located in the Department of Pharmacy of Northwestern University in Chicago. The Chapter house itself is to be found at 208 East Superior Street.

Take of crystals of carbolic acid, 2 ounces; hyposulphite of soda, 2 ounces; dissolve them in 1 gallon of clean water; add of this solution 1 or 2 ounces to the gallon of water that the fowls drink, or mix it in the same proportion in a mash made of ground grain or other food. This not only relieves when sick, but is an excellent preventive.

Replying to your further request for the formula of a powder to be placed in drinking-water for white diarrhea in chickens, we suggest the use of powdered ferrous sulphate. Laudanum in doses of 5 to 10 drops for large birds is an efficient remedy for diarrhea in poultry. If the diarrhea be observed in its early stages it can usually be checked by feeding boiled rice with which is mixed a little chalk in fine powder.

Roach Powders.

Yornin.—“The Scientific American Cyclopedia of Formulas” says that borax is the best cockroach exterminator yet discovered. This troublesome insect has a peculiar aversion to the salt, and will never return where it has once been scattered. As it is perfectly harmless to human beings, it is much to be preferred for this purpose to the poisonous substances commonly used.

You can make a roach poison which is practically harmless to man by the following formula: Borax, 9 ounces; starch, $2\frac{1}{2}$ ounces; cocoa, 1 ounce.

Another formula is: Corn-starch, 8 ounces; powdered sugar, 16 ounces; powdered quicklime, 4 ounces; powdered borax, 4 ounces. Have the ingredients thoroughly dry before mixing, and preserve in a tight box. Scatter where the insects frequent, or use with a powder blower. This is said to be quite efficient.

Horse Liniment.

J. R. C.—We do not know the composition of the proprietary preparation which you mention, but the following formulas have been suggested for a horse liniment:

- | | | |
|-----|-------------------------|-----------------|
| (1) | Camphor | 1 ounce av. |
| | Carbolic acid | 1 fluidounce. |
| | Oil of origanum | 2 fluidounces. |
| | Oil of tar | 2 fluidounces. |
| | Crude petroleum | 2 fluidounces. |
| | Oil of turpentine | 12 fluidounces. |
| | Liquid petrolatum | 12 fluidounces. |
| | Benzine | 16 fluidounces. |

This is called White Oil Stock Liniment:

- | | | |
|-----|-------------------------|----------------|
| (2) | Eggs | 2. |
| | Green soap | 1 ounce av. |
| | Gum camphor | 1 ounce av. |
| | Ammonia water | 1 fluidounce. |
| | Alcohol | 1 fluidounce. |
| | Oil of origanum | 1 fluidounce. |
| | Oil of turpentine | 3 fluidounces. |
| | Water | 3 fluidounces. |

Mix the soap and water to a smooth paste, beat in the eggs, add the oils, and incorporate thoroughly. Dissolve the camphor in the alcohol and stir this into the previous mixture.

Soldering Block-tin Tubing in Fountains.

C. J. H. Co. write: “Please indicate the best method of soldering leaks in block-tin tubing in soda fountains.”

We consulted a tinsmith, who advised the use of a low melting solder. The objection to ordinary solder is the necessity of using so much heat to fuse it that you melt a hole in the pipe in covering the leak. Merely heat the soldering iron sufficiently to melt the low-fluxing solder and then proceed to apply it. Of course the part about the leak should be scraped first

and then brushed with a solution of zinc chloride, made by dissolving zinc in hydrochloric acid. Have an excess of the metal. Heat the soldering iron a little, rub it on the bar of lead, and then apply the solder to the leak. Low-melting solder can be obtained from Buhl Sons & Co., Detroit, or presumably from any wholesale hardware house.

A Prescription Open to Criticism.

R. I. writes: “We have a doctor who persists in writing for the following:

- | | |
|--|-----------|
| Bromidia | 1 ounce. |
| Elixir of iron, quinine and strychnine | 1 ounce. |
| Neoferrin, q. s. | 4 ounces. |

“Now in our opinion this is incompatible, although we have dispensed it several times and the patient is still among the living. But we nevertheless think that the chloral hydrate in the bromidia and the strychnine are physiologically opposed, and the potassium bromide and strychnine may form the insoluble strychnine bromide.”

While we have not actually compounded this prescription to observe whether it precipitates, we do think it should be dispensed with a shake label. The strychnine may be thrown down by the soluble bromide present. Such a reaction is likely to take place. Physiologically, the chloral hydrate and strychnine are antagonistic, but that does not concern the druggist. If there is danger of the patient getting all the strychnine in the last teaspoonful, the dispenser should caution the customer to shake the mixture thoroughly before using. But any physiological incompatibility in the prescription concerns the doctor only.

Cold-water Paste for Wall-paper.

A. L. B. wants a formula for a “cold-water paste” for paperhangers.

To make a paste, take 2 pounds of fine flour, put it in a pail, add cold water, and stir it up together in a thick paste. Take a piece of alum about the size of a small chestnut, pound it fine, and throw it into the paste; mix well. Then provide about 6 quarts of boiling water, and mix while hot with the paste until the whole is brought to a proper consistency. This makes an excellent paste and fit for use when cold.

Short Answers.

S. B.—For information about the cultivation of poppy and the extraction of the opium on a commercial basis, write the Bureau of Plant Industry, Department of Agriculture, Washington, D. C. The Dispensatories tell something about the methods of collecting opium.

E. M. G.—Several formulas for greaseless cold cream were given by H. B. Molyneux in an article on that subject on pages 106-110 of the BULLETIN for March, 1911. See annual indexes for other formulas.

G. J. C.—To prepare a soluble tar solution, follow the U. S. P. formula for syrup of tar, using only 50 grammes of sugar.

A. R. W.—We do not know the composition of the prescription proprietaries which you mention.

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THE MONTH'S HISTORY

THINGS ARE QUIET.

With the approach of mid-summer heat, things seem to quiet down on the pharmaceutical Potomac. Nothing of importance has transpired during the last month. The stagnation may be due to the characteristic enervation of this season of the year, or it may arise from the fact that the energies of the nation have recently been concentrated in two channels only—baseball on the one hand, and the terrific Taft-Roosevelt feud on the other.

At any rate, whatever the cause, if it were not for the State associations, now meeting in annual convention here and there, there would be very little doing of interest to the drug trade. The recent contention over various food and drug bills in Washington has all died down, and the conviction seems to be deep-

ing that nothing definite will be done at the present session of Congress. The hearings before the House Committee on Interstate Commerce finally resulted in the publication of a book of 511 pages—a book which nobody has taken the trouble to read. In Chicago, so far as the N. A. R. D. is concerned, we find the organization beginning an educational campaign for the purpose of convincing proprietors that they should adopt the new Freericks agency-coupon plan for the protection of prices. This is apparently the chief "issue" with the N. A. R. D. just at the present time. Mr. Freericks says that it would be in violation of the Sherman law and some of the State acts to bring any sort of compulsion to bear upon the proprietors. They must simply be argued with and of their own volition brought to adopt the plan because they consider it a wise one.

In the meantime arrangements are being made for the annual meetings of both the N. A. R. D. and the A. Ph. A. The N. A. R. D. convention will be held during the week of August 12 in Milwaukee, and the headquarters will be at the Hotel Pfister. The A. Ph. A. convention will be held the week immediately following, beginning August 19, at the Brown Palace Hotel in Denver. This arrangement is a very convenient one for those who desire to take in both meetings. The N. A. R. D. gatherings usually adjourn on Thursday afternoon or evening, so that the trip to Denver may be taken with leisurely comfort and in plenty of time for the opening general session of the A. Ph. A. on the following Monday afternoon at 3 o'clock. The appropriate committees of both associations have been busy for months in making preparations, and the two meetings will be full of interest.

* * *

THAT SENNA CASE.

We have intimated in the foregoing glance at the month's developments that nothing of startling interest has recently transpired. We might qualify this statement par-

tially by saying that more or less comment has been aroused by the decision of Judge Hand in the "broken senna" case in New York. The government brought proceedings against J. L. Hopkins & Co., the well-known importers of crude drugs, with reference to the shipment of a bale of senna leaves to San Francisco. The package was labeled "Alex. Senna Broken, U. S. P." The government declared that the bale was adulterated in that it contained stalks, stones, pebbles and other substances foreign to senna leaves, and this declaration was supported by the testimony of Dr. H. H. Rusby, Dr. Albert Schneider and Dr. Charles Chestnut.

Judge Hand, however, of the United States District Court for the Southern District of New York, finally took the case from the jury on the adulteration count and directed a verdict for the defendant. The Judge did not say that the shipment was all that it should have been. He did not pass on that question at all. His sole point was that in order to establish a case under the food and drugs act it must be shown in the language of the law that the shipment "differed from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopœia." He found that there was no standard laid down for senna except that it should be free from stalks. The testimony in the case had shown, however, that as a matter of fact senna was never entirely free from stalks, and the question therefore became a practical instead of a theoretical one. Under the circumstances he thought the pharmacopœial language could not be construed literally or absolutely.

The testimony in the case had shown, declared the Judge, that several grades of senna were recognized on the market—such as broken senna, senna siftings, and the like. In a certain loose way people who bought these grades knew what they were and wanted them. He felt quite sure that the particular bale in question should have been labeled senna siftings instead of broken senna, but he could not see that a standard for either was really established by the Pharmacopœia. Since criminal statutes must be construed strictly, he could not feel that he had the right under the circumstances to so strain the pharmacopœial standard as to make it apply in this case. The defendant was therefore exonerated. On the misbranding count the case went to the jury, and the jury also rendered a decision for the defendant.

The case has attracted a good deal of attention and has among other things been discussed very freely in some of the New York papers. Dr. Rusby has been inclined to criticize Judge Hand severely, but has since confessed that he misread the Judge's decision. His first supposition was that the Judge had held for the defendant because the package was labeled "Alex. Senna Broken" instead of plain "Senna," and because therefore it did not bear a pharmaceutical title and was consequently not subject to the pharmacopœial requirements. This supposition was erroneous, as Judge Hand subsequently declared in the newspapers.

* * *

THE PREREQUISITE WINS IN ILLINOIS!

Certainly this is a year of surprises, political and otherwise. For a long time the chief oracle against the graduation prerequisite has been located in Chicago. We refer, of course, to our able contemporary, the *Western Druggist*. In truly T. R. style, the W. D. has thundered month after month against the prerequisite, and we have all been told with great regularity that nobody wanted it, that it would do more harm than good, that it was simply a scheme of the schools to benefit themselves, and that it was subversive of every last principle of a democratic government.

You would naturally expect, wouldn't you, that under such circumstances, and following such leadership, the druggists of Illinois would be united against the graduation prerequisite? But, alas! this is the year of preferential primaries, and the W. D. has failed to carry its own State. This is no particular disgrace, however, since Roosevelt and Taft both had the same experience. We are living in a year when prophets evidently have to go away from home to ease their heartaches.

All of which means that the Illinois State Pharmaceutical Association, after vainly fighting over the graduation prerequisite for many years, and failing to reach a definite conclusion, finally submitted the question this year to every druggist in the State for a popular vote. The result was 965 votes in favor of the prerequisite, and only 247 against it. The victory was so conclusive that it was unanimously decided at the annual meeting of the association last month to approve of the prerequisite idea, and to seek an amendment to the pharmacy act at the next session of the

State legislature. At last it looks as if Illinois would have a graduation prerequisite law very soon.

* * *

ELEVATING THE STANDARD.

Higher standards in pharmacy have been considered in two or three other quarters. The Louisiana State Pharmaceutical Association, at its annual meeting, adopted a recommendation of its Legislative Committee that the graduation prerequisite be approved, and that a bill containing it be introduced into the State legislature. This question has been up in Louisiana for several years, but for one reason and another nothing definite in the way of results has so far been attained. In New Jersey the situation with reference to the graduation prerequisite is made the subject of a letter from Professor Lohmann in this issue of the BULLETIN. Professor Lohmann declares that, contrary to the reported impression, the two schools of pharmacy in New Jersey are a unit in favor of the prerequisite, and that its recent death at the hands of the New Jersey legislature was due to another factor. It looks as though another bill would be introduced at the next session of the legislature.

In New York State the Pharmacy Council of the Board of Regents has passed a resolution recommending that the degree of Bachelor of Science in pharmacy be made customary and that it be granted only after three years of pharmaceutical instruction following a full high school course. It was also recommended that the degree of Doctor of Pharmacy be conferred only after the completion of three years of resident work subsequent to the attaining of the degree of Bachelor of Science in Pharmacy. These new recommendations do not become effective until January, 1913.

The decision with reference to the degree of Doctor of Pharmacy would apparently put this degree on the same basis as that of Doctor of Medicine in New York State. Unless we are mistaken, the latter is granted after a full four years medical course, preceded by two years of collegiate or university work, making a total of six years. Certain schools of pharmacy, however, are giving the degree of Doctor of Pharmacy for much less work, and it remains to be seen whether the Board of Regents in New York can standardize the degree in the manner suggested.

ANTI-NARCOTIC RESTRICTIONS.

On more than one occasion the BULLETIN has argued that it is of little use to enact an anti-cocaine law and leave the sale of opium and morphine unchecked. It is equally futile to have an anti-opium law, with no restrictions on the sale of cocaine and other narcotics. For a drug habitué, denied solace in one direction, will frequently if not always turn for sympathy in another, and no real good will be accomplished. This truth has been forced home in Kentucky during the last few years.

Kentucky has an anti-cocaine law, but there has practically been no let or hindrance in the sale of opium and morphine. The Board of Pharmacy has vigorously and with great courage sought to do what it could. The sellers of cocaine have been prosecuted with great energy. But little could be done, so far as opium and its alkaloids were concerned, and the Board has recommended time and again that the situation be corrected by legislation. The chance came this year with a Louisville druggist as a member of the legislature—Emanuel J. Meyer. Mr. Meyer worked hard and got a bill through the legislature, and signed by the governor, restricting the sale of opiates to physicians' prescriptions, and the Board of Pharmacy is now in position to close the leak by which its efforts have been rendered futile all these years.

Incidentally, during the passage of the bill through the legislature, it was declared that probably 200,000 ounces of morphine had been sold in Kentucky every year—an amount representing 350,000,000 average doses!

* * *

DR. WILEY'S BERTH.

President Taft has not yet appointed a successor to Dr. H. W. Wiley as chief of the Bureau of Chemistry. In the meantime Dr. Wiley himself continues to occupy the center of the stage. For two or three weeks the birth of a son and heir attracted the attention of the newspapers, and there was a good deal of free advice as to how a pure food baby should be nurtured and reared. This losing interest after a time, the Doctor became ill of grippe, and he was apparently in a serious condition for a week or two. Recovering from this, a good deal of publicity was next given to an offer from Boston to make him head of the Board of Health down there. After some

deliberation and more publicity the offer was rejected.

In the meantime the Doctor's berth remains unfilled, as we have said. The drug trade continues to be interested in the candidacy of three of its own men—Charles Caspari, Jr., Frederick J. Wulling, and James H. Beal. Dr. Caspari's friends feel that his excellent record for the last two years as Pure Food and Drug Commissioner of the State of Maryland entitles him to very serious consideration. Dr. Wulling's supporters are still warmly advocating his appointment, and we observe that some of the State pharmaceutical associations are putting themselves on record as in favor of Dr. Beal and are asking for his appointment at the hands of President Taft. The Beal candidacy was started first, and has attained a good deal of momentum in various branches of the drug trade, though it must be said that Professor Beal himself has done nothing to help it along.

Meanwhile it does not look as if President Taft was in any hurry to fill the office. Secretary Wilson has been quoted as saying that for the present things are getting along very well as they are with Messrs. Doolittle and Mitchell in control of the situation.

* * *

ANOTHER FAMILY FIGHT.

Two of our good friends seem to be engaged in a deadly struggle. They are not only friends, indeed, but they enjoy the distinction of being our rivals and competitors also. We refer to the *Pharmaceutical Era* and the *Druggists Circular*. The *Era* says the *Circular* has been committing theft—and it says a number of other harsh things also. It has accordingly brought suit for damages.

What is it all about? Well, we haven't heard the *Circular's* defense, but we find that the *Era* is making some such charge as this: The *Era's* price list contains two or three features which the *Era* itself worked out at the expense of a good deal of time and money and then copyrighted. The *Circular*, ignoring the copyright, "borrowed" these protected features from the *Era* for its own list without saying as much as by your leave, and without even giving any credit. The *Era* saw its labor and cash going for naught, and thereupon brought suit for infringement of its copyright, asking also for an accounting and damages.

So there you are. As a good friend of both

papers, we must observe a strictly neutral attitude, somewhat resembling the picture of Justice holding the scales aloft with suspended arm. We hope, however, that our two friends won't be too mean toward one another, and we trust that no soiled linen will be washed on Broadway. To be accused of theft—Oh my, isn't it awful? We just can't believe the *Circular* is guilty, because we remember that on more than one occasion it has indignantly charged other journals with the same offense. Isn't this proof of innocence?

* * *

WILBUR WRIGHT'S DEATH NEEDLESS?

The recent death of Wilbur Wright has brought out many expressions of high praise for the man and the inventor. It is quite generally declared that he deserves to rank with great men like Watt, Fulton, Whitney, Morse, Bell, Edison, and other inventive geniuses of the age. The death of such a man, so early in his career, has seemed a needless sacrifice, and we find the *Boston Medical and Surgical Journal* devoting an editorial to this phase of the question.

Mr. Wright died of typhoid fever, and the *Journal* argues that deaths from this disease are now entirely inexcusable, since absolute immunity may be secured by the use of a protective inoculation of typhoid vaccine. This remarkable agent has so far not been found of any particular service as a curative, but as a prophylactic it is all but certain in its action. Wilbur Wright had of late years made very few flights, and in this respect and in others had avoided the professional risks of his occupation. He had, however, in the *Journal's* opinion, failed to avoid another risk equally great.

The *Journal* even goes so far as to declare that every man of prominence in the community, whose life is of great value to himself and his country, should be protected against typhoid fever by the preventive use of typhoid vaccine. Ultimately, indeed, the *Journal* hopes that the employment of the vaccine will be made universal.

* * *

CERTIFIED DRUGGISTS.

An interesting step was recently decided upon at a get-together meeting in New York City. The meeting itself had been arranged by the New York branch of the A. Ph. A., and the members of the Medical

Society of the County of New York were guests. Among the addresses delivered from the pharmaceutical side of the house was one by Dr. James H. Beal, General Secretary of the A. Ph. A., who was brought from Scio, Ohio, as a special attraction. But we started out to mention the interesting action taken at the end of this meeting. It was decided on motion of Jacob Diner to appoint a joint committee of 20 members—10 from the Medical Society, and 10 from the New York branch of the A. Ph. A. This committee will be asked to formulate some plan of differentiating between pharmacists professionally, and of publishing a list of those especially worthy of the confidence of the medical profession. This will be somewhat after the method followed by the Milk Committee of the New York Medical Society in certifying to the hygienic condition of commercial dairies. If the list of approved druggists is finally published, we shall know who is who in pharmaceutical circles in New York!

* * *

The Tennessee Pharmaceutical Association has undertaken a most interesting and important piece of work. It is now endeavoring to raise an educational fund for the assistance of worthy young men who need financial help in getting a pharmaceutical training. The money will not be given them, but instead will be loaned, and the idea is to help them through the pharmacy school. A start was made at the convention last year, when it was voted to lay aside \$10 from the treasury every year for this educational fund. Since then a committee has been appointed to increase the fund greatly by individual donations. An appeal to every druggist in the State has been made during the last month or two, and it is hoped to be able to report a collection of a thousand dollars when this year's meeting opens at Chattanooga during the present month. The secretary of the committee is M. E. Hutton, of Nashville.

It will be remembered that the Michigan State Pharmaceutical Association developed a plan of this kind some years ago as a memorial to the late Dr. Prescott. The Prescott Memorial Fund has been used to help a number of young men through college who would otherwise have had to deny themselves a pharmaceutical education.

We dislike to say "I told you so," especially when human sorrow is involved, but we cannot resist the temptation to print the following from a recent issue of *N. A. R. D. Notes*:

J. E. —, a loyal member of the N. A. R. D. at —, Ky., had the misfortune to lose his drug store and its contents by fire on May 24, 1912, the value being about \$2000; no insurance.

Bro. — has been ill and confined to his room for the past eight months. The loss is a severe one to him, and he has expressed a willingness to receive contributions from any of his fellow druggists and others who are disposed to come to his assistance.

While we are exceedingly sorry for Mr. —, and while we hope that members of the N. A. R. D. will come to his assistance, we are moved to ask once more: Why will druggists continue to make the unfortunate and needless mistake of carrying no fire insurance? The cost of protecting a stock of \$2000 would have been inconsiderable, but just because this druggist wasn't willing to spend a small amount of money he is now in severe straits. Certainly no druggist ought to be without fire protection.

* * *

DEATH OF HENRY BIROTH.

Henry Biroth, honorary president this year of the A. Ph. A., and a prominent member of the Chicago Veteran Druggists' Association, died May 29 at Baden-Baden while abroad. His daughter, Mrs. Massey, had been sent for, but did not reach him in time. John Blocki, another one of the veterans, was with him on his tour. Mr. Biroth was a man of singular gentleness of character. Wilhelm Bodemann, a personal friend of over forty years, describes him as "an art connoisseur, a music lover, a philosopher, a poet, and a genuinely good man."

* * *

Will somebody of diplomatic ability—some one who can turn the other cheek if necessary—please set General Charles Mylert Carr straight? He still insists in *C. R. D. A. News* that if a merchant "pays cash and takes the discount he doesn't need any credit." Doesn't he need it during the ten days' interim? Would the jobber send him the goods at all, and put them in his possession, if he didn't have credit? And doesn't he best establish his credit by the very custom of "paying cash and taking the discount?"

EDITORIAL

THE IRONY OF FATE.

The BULLETIN has had nothing to say about the sinking of the *Titanic*. We have left that chapter of horrors to the newspapers and the lay magazines. But some of the material accepted for publication in our journal prior to that great disaster has since taken on new significance. Mr. Cooper, of Lion's Head, Ontario, in an article in this issue describing a trip to Europe, speaks in the most glowing terms of the Cunarder *Lusitania*. This story was written last summer, and was one of the vacation narratives that we were soliciting at the time. It is a question whether the writer could to-day pen a similar eulogy of the modern ocean-going vessel! The first few paragraphs are virtually a panegyric of one of these great monarchs of the sea. Mr. Cooper waxes eloquent in its praise and declares that "It gives the lie to the anguish-laden cry of David, 'What is man that Thou art mindful of him? and the son of man that Thou visitest him?'"

Perhaps it takes just such a disaster as that of the *Titanic* to prove the wisdom of David. What could bring home to us more forcibly the truth of this biblical line than the thought of that mighty ship, worth more than the largest drug manufactory in the United States, the last word in naval architecture, going to the bottom on its maiden trip, a mass of wreckage! With all due respect for the great ship on which our friend sailed, it will be a long time before any of our readers will write of an ocean vessel in a similar vein. One can't help seeing a certain irony in this encomium to a class of steamers that less than a year afterward must surrender their prototype to the elements. Time and fortune play havoc with the writings of men. Over night the entertaining may change to the gruesome, praises may give way to criticism, and a feeling of confidence to one of insecurity.

By way of showing us the luxury aboard these vessels, our contributor submits an illustrated booklet distributed by the steamship company. The following excerpt is typical:

This room is a veritable triumph of the decorator's art. We have a perfect representation of an eighteenth century French salon. The walls are paneled in dull

polished mahogany with gilt mouldings, relieved by fleur de pêcher marble pilasters and Aubusson tapestry panels. The carpet is pearl-grey with blush-pink roses, forming a foil for the chairs and settees, which are the acme of comfort and luxury.

How strange it all sounds now! Almost like a travesty!

Events of a day sometimes suffice to change entirely the light in which a printed page or line is read. It was only a few days after news of the *Titanic* disaster reached the BULLETIN office, for instance, that we were perusing the proofs of jokes culled for The Scrap Book. This material had, of course, been compiled weeks before that tragedy took place. To our dismay we ran across a joke which had been clipped from the *Louisville Courier* prior to the disaster. It read somewhat as follows:

Aunt to her niece: "You know, my dear, I feel alarmed. I am so afraid of icebergs."

"Nonsense, Auntie, there is no need of alarm. There is nothing to fear."

Auntie: "Well, anyhow, here's a dollar. Give it to the captain and perhaps he will be more careful."

What gruesome humor! It is needless to say the editor ran his lead-pencil through this joke in a hurry. It was acceptable enough when clipped, but in the light of new circumstances had ceased to be amusing. The joke, however, like Mr. Cooper's praise of the Cunarder in this issue, only goes to show the irony of events and the effect of time and fortune on the ideas of people.

THE STATUS OF PRICE PROTECTION.

Just what may be done in the maintenance of prices on articles not protected by the patent laws, is still very much open to question. The decision of the United States Supreme Court in the Miles case was confusing, and since that decision was rendered it has not been at all clear whether any other form of price protection would be considered valid under the Sherman law. In the meantime, however, the Miles Company, the Freeman people, and other manufacturers have so changed their price maintaining plans as apparently to make them legal. The N. A. R. D., too, has worked out a plan which it hopes and believes will stand the test of court construction. In the event that it will not stand this test, however, the N. A. R. D. is also endeavoring to have the Sherman act amended

in such manner that retailers may act together for the protection of their own interests, and may establish price-restrictive measures of a reasonable character.

So much, then, for the status of price protection as it affects trade-marked and proprietary articles which are not patented. Everybody understands, of course, that the so-called "patent medicines" have never been really patented at all—barring a very few instances which need not be considered. So far as price-maintaining agreements or contracts are concerned, there is a vital difference between patented and unpatented articles in that the former, unlike the latter, may be controlled absolutely by the owners of the patent. The owner of a patent, given a monopoly for a certain period by the government, has always been able to say under just what conditions he might or might not sell his article, and he has also been able to impose conditions upon those in turn who bought the article, either for their own use or for resale. A few months ago, indeed, a decision was rendered by the Supreme Court which confirmed this right so absolutely that a wail of protest sprang up all over the country.

Since then there has been more or less of a desire to curtail the privileges accorded patentees, and so it is that one or more bills have been introduced in the present Congress making it illegal for the owner of a patent to place any restrictions whatsoever on the use or sale of the goods after they have left his hands. Among other results, such legislation would effectively wipe out all price-maintaining contracts or plans so far as patented articles are concerned. Naturally enough, the makers of patented goods have flocked to Washington and have vigorously opposed the passage of these bills. They have also gotten the advertising journals enlisted in the cause on the plea that whatever hurts their business will make it necessary for them to curtail their advertising appropriations. Deny them the full benefit of their advertising, they say, and they will no longer use advertising in full measure.

The whole question is an exceedingly interesting and important one. Just what Congress may do with these bills it is yet too early to predict. On the one hand we have the effort of the N. A. R. D. and other retail organizations to so amend the Sherman law as to

make price agreements possible. On the other hand, we have a group of bills in Congress introduced to make price agreements impossible and illegal. Congress will find it necessary to reconcile these conflicting movements, and in time to work out some policy which will protect the public interest.

MOVING WITH THE TIDE.

In this age of branded goods, when many druggists are pushing some special line, it is pertinent to inquire, "Who are selling the products that need *no* pushing? Who are supplying the popular articles that sell themselves, that are being borne forward on the shoulders of mighty advertising appropriations?"

Millions of dollars are spent annually to give publicity to a wide variety of articles for which the drug store is the natural avenue of distribution. But is the druggist making the most of the opportunity? That he occupies a strategic position every manufacturer knows. People are being sent to him as they never were before; but is he fostering the movement? Just glance at the advertising pages of any popular magazine and see for yourself the barrels of money that are being spent to create business for the dealer who is wise enough to handle the goods. What a mistake, then, what a pity, to let all these expenditures go on without trying to derive from them those advantages that they are intended to convey to the druggist! Let a proprietor sell what make of goods he will, but let him also carry the advertised articles, the kind that people are being educated to buy and order spontaneously.

Any druggist who fails to arrange at intervals a window display devoted to modern advertised goods is missing an opportunity to make his store the place of the hour, the modern up-to-the-minute shop, where things in popular demand can be had. He fails to see that the manufacturer is sending customers to his store. By his very inertia, he obstructs instead of quickens the movement of trade to the retail pharmacy. The druggist who fails to link his store in the minds of the people with the leading national producers, is making one big mistake. As well bury our faces in the sand as be blind to the enormous influence of the advertising manufacturer. He

reaches more homes for you than you can reach yourself. And never has the manufacturer of popular articles been more eager to coöperate with retailers for the creation of new business than he is to-day.

Good Housekeeping Magazine, for example, has even gone so far as to establish a cut and copy department that furnishes the druggist and other retailers with advertising material bearing on the sale of household articles exploited to the public in its pages. Many druggists have wisely taken advantage of this service, for we have seen some of their circulars in which this material has been used. They have realized that advertised goods are self-selling. They spell easy business. They save time. They mean a quick turnover, create good-will for the men who handle them. They hold customers. They afford a line of negotiable stock that the people want, goods that can be turned into cash at a moment's notice should the money ever be desired. Are such benefits to be slighted?

THE FLY NUISANCE.

The druggist, as one of the skilled men in his community, is looked to for advice and leadership in matters affecting the public health. He ought therefore to do what he can in this new movement to get rid of the house-fly. During the last few years it has been discovered beyond all question of doubt that flies are carriers of many diseases, chief among them being typhoid; that their habits are filthy beyond description; that they are constantly bringing into our houses and onto our food the dirt and the disease germs collected from alleys and other unclean places; and that they are altogether a startling menace to the public health.

"We must get the fly or the fly will get us"—this is the warning which has gone forth from all the boards of public health during the last year or two. The difficulty of the problem is found in the enormous procreation of the fly. Dr. Hewitt, a well-known investigator of the fly problem, has discovered that a pair of flies, beginning operations in April, may be progenitors, if all were to live, of 191,100,000,000,000,000,000 flies by August. Think of it! This illustrates the importance of attacking the fly problem as early in the summer as possible, and keeping at it vigorously.

In cities the two places where the fly nuisance is propagated most are manure piles and garbage cans. In the former the flies breed in great numbers; around the latter they swarm for food. Nearly all cities of prominence in the country have recently passed ordinances regulating the disposal of manure and providing for the use of proper garbage receptacles. In many cities, too, the use of fly-traps has been urged strenuously during the last year or two. These are placed where flies are most frequently found—on garbage receptacles, for instance—and they successfully catch millions of the pests. A number of boards of health in different cities have offered prizes to those catching the most flies, and the whole movement, in all its aspects, is deserving of the very greatest consideration and the most general support.

The fly is not only a nuisance—he is a source of great danger. Fortunately he can be very largely eliminated if the problem is attacked with vigor and unanimity. Every man who has his own health and the public interest at heart should concern himself with the fly problem and help the good cause along.

THE HALL OF FAME

A WESTERN JOBBER.

During the last few months we have been running in the BULLETIN OF PHARMACY a series of portraits of well-known jobbers



L. B. BRIDAHAM.

throughout the country. One picture came in too late for the series, however, and we are therefore reproducing it in this place. It will be recognized as an excellent likeness of Lester B. Bridaham, vice-president and general manager of the Davis-Bridaham Drug Co., Denver, Colorado.

DR. STANISLAUS REMEMBERED.

Dr. I. V. Stanley Stanislaus has recently resigned his position as dean of the Medico-Chirurgical College of Pharmacy in Philadelphia, and it is announced that he will go into the manufacturing business. Dr. Stanislaus made a good record at the Medico-Chi, and it



DR. I. V. STANLEY STANISLAUS.

is very evident that he endeared himself to the students and alumni. On June 1, at the annual meeting of the Alumni Association, he was made honorary president of the organization and was presented with a handsome silver loving-cup. The presentation was made by W. Wilson McNeary, president of the Alumni Association.

A DRUGGIST TURNED BANKER.

There isn't money enough in the drug business for some people—even though they are remarkably successful at it. This doubtless explains why B. S. Cooban, the well-known druggist of Chicago, has turned banker and has recently been elected secretary of the Chicago City Bank and Trust Company. We are showing a recent portrait of Mr. Cooban and

a picture also of the interior of the bank with which he has become affiliated. Incidentally it ought to be explained that Mr. Cooban will still retain his store, although he expects to be at the bank most of the time. The net result



B. S. COOBAN.

will be that a hard-working man will become still more industrious. As readers of the BULLETIN know, Mr. Cooban was for several years a steady contributor to this journal, and for a considerable period he also conducted a



The Chicago City Bank and Trust Company.

department known as "The Druggist's Specialties." Since then he has been so thoroughly occupied with his growing interests that we have heard relatively little from him, but his success and development are matters of interest to us and to our readers.



D. J. Fink of Holdrege, Nebraska, whose pharmacy this is is one of the prominent men in pharmaceutical affairs in that State. Mr. Fink himself stands at the left.



Here we have the Berry Drug Co. of St. Matthews, S. C. The fixtures look as if they were made by Bangs, while the space given up to soda indicates that quite a business is done in that line.



E. G. Burroughs, Ladonia, Texas, is understood to be one of the best business men among the pharmacists of his State. His success has been very pronounced.



Ed. J. Neer is the proprietor of this store in Portales, New Mexico. Mr. Neer himself is the gentleman behind the counter at the right.



William McIntyre, the well-known retired pharmacist of Philadelphia, is seen standing outside the store which he owned and conducted up to the time of its sale six years ago.



H. H. Pember, Rock Valley, Iowa, certainly has a unique and interesting looking store—built after his own ideas. Mr. Pember is the gentleman in front.



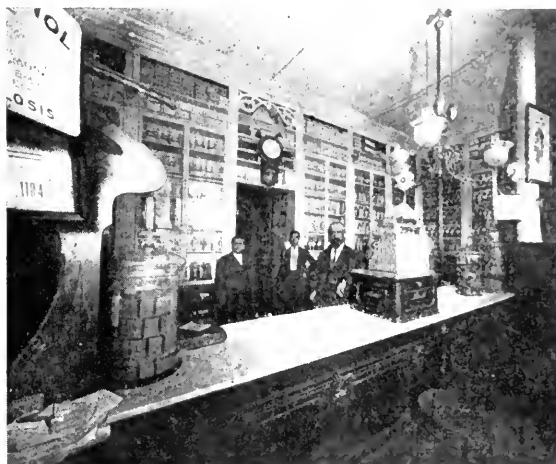
We start off this page with a pharmacy in Caracas, Venezuela. The proprietor is M. A. Abrahamsz, who is presumably the gentleman standing in the foreground.



We next jump over into Honduras, and we show an interior view of the "Farmacia Central de Arias," owned by Fiallos y Cia. The town is Santa Rosa de Copan.



This store is located in Port Limón, Costa Rica. It is under the ownership and control of Kirkpatrick Hnos., and does a gratifying business.



We are now in Lima, Peru, and this is the store of Messrs. F. Bressoud & Cia.—one of the most prosperous in the country, and well known to travelers.



Jumping over now into Australia, we have here the American-looking establishment of J. A. Walker, in Northcote, Victoria. This is certainly a neat-looking building.



This is a nearer view of Mr. Walker's window, containing a display of a well-known American product—Euthymol Tooth Paste. American goods are evidently featured.



[Picture made especially for the BULLETIN OF PHARMACY]

Druggists Photographed in Their Stores.

4. Charles A. Storer, Chicago, Illinois.

A VACATION ABROAD.

One of the BULLETIN Readers Takes a Trip to Europe—A Description of the Voyage—His Impressions of London and Its People.

By S. C. COOPER, PHM.B.,
Lion's Head, Ont.

There are people living who remember taking six months to cross the Atlantic Ocean. And not a few recall the generally accepted statement that a person in an express train going more than thirty miles an hour would find it impossible to breathe. To-day we defy the wind that the ancient mariner sought to propitiate. The evolution of invention constantly exchanges the wasteful for the economical. We cannot look back; we dare to look and to leap forward.

THE START.

Such random thoughts as these coursed through my mind as we swung clear from Long Island and began our race toward Europe. Beneath my feet was the deck of the Cunarder *Lusitania*, at that time the last word in naval architecture—a concrete monster that had audaciously and assuredly taken tribute from the mechanical and artistic geniuses of the ages; a gigantic structure that the god Man had pronounced good. And as she cut the breakers and wallowed the foam, gorged mountains of coal and belched forth rivers of ashes and waste, I considered that the lie had been given to the anguish-laden cry of King David: "What is man, that Thou art mindful of him? and the son of man, that Thou visitest him?"

I timed her! For one hundred and thirty-one hours less ten minutes she had, without intermission, thrashed the waters of the deep. Years before she had found herself and in the exuberance of youth had smashed all records. Day and night the same vibration thrilled her, only 'twas a little more pronounced as she reached the haven, having like the "ship of the desert" consumed the life-giving energy from the depths of her vitals, which made the modest efforts of the shining salty spray to hide the gaudy colors 'neath her water-line vain and futile. As on deck I dozed, even slept, drank tea or bouillon, munched biscuits or sweets, or with soul aquiver scanned

the pages of Zola's "Truth," my thoughts turned repeatedly to the army of grimy, sweat-drenched human beings down in the bowels of that leviathan feeding the capacious maws of a hundred insatiable furnaces.

VIEWS OF LAND.

We had passed the bleak and barren coast of Ireland and were making our way to the southwest corner of Wales. The beautiful, emerald-tinted shores came into view, the ship hove to, and we boarded the tender for Fishguard. Goodwick reminded us that we were in another continent. The language, manners, and customs of the people were different. We liked it so well that we stayed there that night,



View of the grand dining saloon on the *Lusitania*.

and arose early to see the village before leaving for London.

The quaintness of the landscape delighted us. Everything seemed small. Small railway carriages and cars, small picturesque stations, small white-washed houses, small hedge-bounded fields; with a changing panorama every minute. After passing under the River Severn, thus getting into England, everything looked more prosperous, and on a larger scale.

An express train places you in London in less than four hours, which means that you can cross England in two hours. As I looked

down the vista of English history and thought of what skeins had been unraveled, what burdens had been carried, what triumphs had been scored, in and by, that tight little island, I, in spirit, patted her on the back with a "Well done, little 'un!" I realized that greatness had no reference to size or number, but the importance of a commonwealth depended upon the accomplishments and ideals of her people. One man can give the key-note of an inspira-



First-class "lounge" on the *Lusitania*.

tion for an empire, yea, for the whole world, even as Hampden did for England, as William Tell did for Switzerland, as Garibaldi did for Italy, as Voltaire did for France, and as Washington did for the United States. I realized also that a commonwealth prospered in proportion as she resisted oppression.

LONDON READY FOR THE CORONATION.

In London at Paddington Station we stepped into a taxi and were soon one of the units of a striving, puffing, grinding, honking, ill-smelling mass, dodging in and out past slower vehicles, stopped now by a string of traffic at a cross-street and again by a policeman's uplifted hand. We passed buildings that for centuries had been England's pride, that were now hidden by far extending tiers and scaffolding that supplied seats to view the coronation procession. Pall Mall, St. James Street, and Whitehall were lined with poles, spanned by arches, and festooned with bright artificial garlands. Each building contributed its quota to a drafted scheme of decoration. From Trafalgar Square we could see the two opposing parallel streams of traffic crossing Westminster Bridge; opposite, the National Gallery was hidden by coronation seats.

London is a monster, a gigantic multi-miliped, sullen and playful, yet determined and irresistible. It has an indefinite something in its disposition, something that insinuates, then throws about you cajoling tendrils, and finally holds you with the bands of an octopus. The usual city strikes you as a pile of bricks and mortar, but London becomes a thing with life and instinct, a being capable of investing one with inspiration. You cannot know London by simply seeing the sights. London must grow upon you, and little touches here and there help it to do so.

INTERESTING INCIDENTS.

One evening at the Baker Street tube station a dozen factory girls waiting for the train formed on the platform in two lines. Each faced the other, and with enthusiasm, laughter, gesture, and romp, each with a penny bunch of flowers in her hand, sang in unison, "Fall in and follow me."

One warm evening a characteristic "Charlie" was strolling along the Dalston Junction platform with his coat over his arm; a "lady" on a train passing through put her head at the window and queried, "Pretty warm, mate?" With a blank stare Charlie replied, "If I were cold I should put my jacket on."



The veranda café.

Being "spotted" as "Americans" we thought very amusing. One boy on the street explained: "I usually can tell the Americans because they have gold in their teeth, and the way they talk, sir." The street-hawkers persisted in trying to sell us miniature "Stars and Stripes," and passing a stall of trinkets we were informed, "They are all good, made in America." Further on a newspaper vender

bawled into my ear, "All the latest New York papers, sir!"

As my wife and I are Canadians our merriment may easily be imagined. By usage the

word "American" has come to be restricted to the United States in application. The visible gold supply was *nil*, but the urchin got some copper.

How the Druggist's Sundries Are Made.

FOURTH PAPER: PRESCRIPTION BOTTLES.

One of the Oldest Industries Known to History—The Manufacture of Glass—The Blowing of Bottles—A Glimpse into the Chemistry of the Work—The Effect of Heat, Light, and Moisture on Prescription Ware—How Graduates are Made—A Delightfully Interesting Article.

By JOHN WHITALL NICHOLSON, Jr.,
Of the Whitall Tatum Company, Philadelphia.

While the prescription bottle can scarcely be classed as an item of druggists' sundries, its claim to attention here is none the less valid, owing to the vital interest every druggist has in the character and quality of the prescription vials used in his store. This article therefore, without going into technicalities, will endeavor to explain the process of manufacture and other points of practical interest to the druggist, gleaned from the experience of a factory that has been making glassware for over a century.

EARLY DISCOVERY.

The history of glass making dates back at least 4000 to 6000 years. Rawlinson, a most conservative authority on the subject, states that "glass was known in Egypt as early as the Pyramid Period," which is estimated to have been about 2450 B. C. The earliest evidences of glass manufacture are found in Egypt, and to the Egyptians therefore must be given the credit of discovery of the art. Owing to a story told by Pliny, and subsequently repeated by Tacitus and Strabo, it has been thought that glass making was an accidental discovery made by some shipwrecked Phœnician mariners while cooking their food on the banks of the River Belus. This seems to be substantiated by the good quality of the sand at a point near the mouth of the river and also by the excellence of subsequent Phœnician glassware, but it is highly improbable that the high temperature necessary for the production of glass could have been obtained under the conditions described

in Pliny's Narrative, and the story therefore has been discredited.

DEVELOPMENT OF MANUFACTURING PROCESSES.

The ancient methods of manufacture were of course very crude, but it is interesting to note that up to the middle of the last century the processes in use were still little better than those which reached their perfection in the middle ages. Even now the old operations are carried on in much the same way, but with improved tools and implements which greatly facilitate the work. Recently, however, there have been many inventions along the lines of strictly mechanical processes with the view of eliminating as much as possible the uncertain element of skilled labor. Most of these have proved failures or have been commercially impracticable; but in certain lines of bottles, principally of the wide-mouth variety, mechanical processes are in almost universal use, and at recent exhibitions machine-made bottles have been shown which compared favorably with the hand-made article.

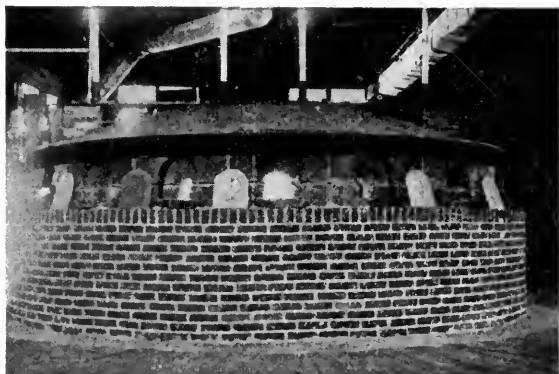
Doubtless mechanical methods will ultimately take the place of all of the old operations still in use, but at present skilled labor is still necessary for the production of high-grade prescription ware.

CRUDE MATERIALS.

Silica (sand), soda (soda-ash), and lime are the principal and essential constituents of glass, which we may define as an amorphous structure, a vitreous body with the entire ab-

sence of any definite grouping of the molecules into crystalline formation. Potash, lead, zinc, tin, and antimony also play a part in the manufacture of various kinds of glass, and other materials, as manganese, oxide of iron, cobalt, arsenic, etc., etc., are also present either as impurities or as chemicals used to correct or neutralize impurities.

Owing to the fact that the transparency of glass shows up defects in color or quality very readily, great care must be used in the selection of raw materials and their proper mixture before they are introduced into the melting pot or tank. In this respect greater care must be used in the manufacture of flint bottles than in window glass. Window glass, while transparent enough for the purpose for which it is intended, will almost invariably show up green when viewed edgewise. This feature the bottle manufacturer has to eradi-



The working end of a tank, showing the openings through which the gatherer gets the molten glass on the end of the blowpipe.

cate in certain lines of ware, as the thick base and double walls of a bottle will show clearly any tinge of color. Other essential requirements of bottle glass are that it be strong enough to resist internal pressure of effervescent liquids as well as the shock of ordinary usage, and that it have sufficient chemical resistance to withstand the action of the liquids the bottle is to contain.

IMPORTANCE OF CHEMICAL ANALYSIS.

The work of analysis, with all its complicated details to meet the varying conditions of the raw materials, the correct fusing of the constituents, and the eradication or neutralization of impurities, devolves upon the chemist.

In the flint glass factory of Whitall Tatum Company, there are two chemists constantly busy testing every bit of material, and regulating from day to day the percentage of the

various constituents, in order to counteract any condition that might tend to interfere with the uniformity of the product.

It must first be ascertained that the various raw materials are chemically and physically uniform, in order that the proper results may be forthcoming. For instance, as the moisture in the sand will affect the composition of glass, if perfectly dry sand cannot be obtained, there should be at least a *constant proportion* of moisture. Otherwise it becomes necessary to test the percentage from day to day in order that a uniform product may be obtained. Again, sand is required to be as nearly pure silica as possible, but it is frequently found in connection with fragments of more or less decomposed felspar which introduce alumina, iron and alkalis, which have to be eradicated before it is possible to get satisfactory results. Whatever the impurities may be, it is necessary to ascertain that they are to be found in uniform percentage throughout the material, in order to measure out intelligently the amounts of the various chemicals used for their extraction or neutralization.

MIXING THE MATERIALS.

All material that has passed chemical inspection is then taken to the "batch" house. In the upper part of this building there are bins for storing the various chemicals and raw materials. These bins are connected with the mixing room below by chutes which are operated so as to empty into cars specially designed for the purpose. These cars run on a track, and directly under each chute is a balance of platform style upon which the car rests while the operator weighs out the proper amount of each material required. The "batch," as the mixture of raw material is called, is then taken to the top of the building by means of an endless chain of scoops, and passes down again through two large revolving cylinders, so constructed as to thoroughly mix the various elements. As it escapes from the second mixing cylinder the batch passes into a small car, which is then hauled to the charging end of the furnace or tank.

A MODERN CONTINUOUS TANK.

Before proceeding with an account of the manufacturing process, it might be well to describe one of the great modern continuous tanks and its advantages. The tank is a

large oblong structure having one flat end with a single opening for charging, the other end being semi-circular in shape with about twelve openings from which the molten glass is gathered by the operators. The batch, mixed with a proper amount of "cullet" or broken glass, is introduced into the tank through the charging end by means of a specially constructed carrier which allows the men to stand at a safe distance from the great heat when the door is opened. When looking into this seething hole it is necessary to have a piece of blue glass to protect the eyes from the terrific glare. To form an idea of it, one has to imagine an immense lake of fire appearing as if lighted by many



A "shop" at work. One blower is shaping a bottle on the "marver," while the other is blowing his bottle in the mold. The "snapping up" boy in the center is placing a bottle in the clamp which holds it, while the "gaffer" on the right finishes the lip.

illuminated bulbs produced by the combustion of gases. The batch being turned into a molten mass by the great heat at the charging end, gradually flows down to the semi-circular working end, keeping the gatherers constantly supplied with a uniform molten material to work on.

For all ordinary purposes the continuous tank furnace has now entirely superseded the old pot furnace, although these are still in use when it is necessary to make up a small quantity of some special glass, and where some special materials have to be melted together that could not be kept together in a tank long enough to combine properly.

A tank furnace utilizes heat more efficiently, as the glass surface extends over the entire area of the furnace. Moreover, it permits continuous working, as the charging at one end does not interfere with the work at

the other, and there is no loss of time as is the case when refilling or renewing a pot. A large uniform run of glass is the result, as a tank furnace will hold about 125 tons of molten material, of which about 15 tons are used daily.

BOTTLE BLOWING.

At each opening in the front of the tank there is a group of men and boys constituting what is known as a "shop." As a shop carries on its own work separately from the many other similar groups, all we have to describe is the operation of a single one, and we have the process in a nutshell.

The first operation for production by hand, and also for most machine processes, is that of gathering the necessary amount of glass required to make the bottle desired. Each shop that carries on the work by hand has two blowers who gather the glass in the form of a ball on the end of their blowpipes, which are about five or six feet in length with a slightly enlarged end or "nose" for gathering purposes. This must be done with judgment, as too much glass would make the bottle overweight and consequently under-capacity, since the outside proportions of a prescription vial are determined by the size of the mold, and any extra glass, therefore, would cut down the content, because it could not expand beyond the confines of the mold. Too little glass, on the other hand, makes light-weight bottles with too great a capacity accordingly.

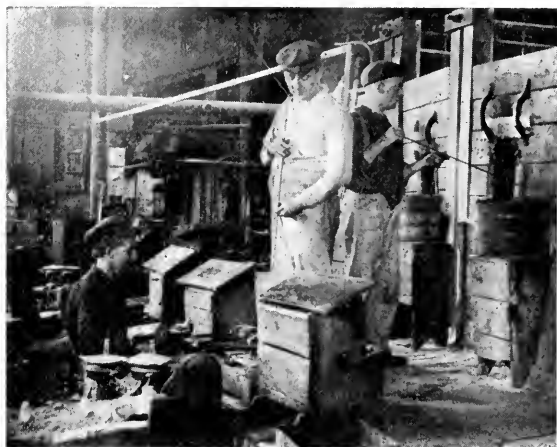
After sufficient glass is gathered, it is worked and rounded into a pear-shaped hollow mass by blowing, or rolling on a metal plate called a "marver." The molten mass is thus shaped and distended gradually, the blower swinging the pipe all the while drawing the main mass of glass downwards and leaving a thinner rudimentary neck next to the pipe.

When properly shaped, the molten bulb still attached to the blowpipe is put into the mold, which is opened and shut at the proper time by a mold boy; and after more or less vigorous blowing, as the case may require, the blower detaches his pipe and the mold is opened, showing a perfect bottle but without the lip.

LETTERING.

It might be well to say a few words here about the molds for lettered bottles, as a

large part of this work, aside from the enormous output of bottles for patent medicines, pharmaceutical preparations, etc., is the manufacture of the bottles bearing the druggist's name-plate. All stock molds for prescription bottles of various styles are made with a removable blank plate which can be taken out when desired and the druggist's private plate inserted. One whole machine shop is given over to the manufacture of the molds and lettered plates. The private lettering and



Gatherer, blower, and mold boy. Note the metal tables or "marvers" for shaping the bottles before they are put into the molds. The scales for weighing the bottles appear in the foreground by the mold boy.

designs, which are often quite intricate, are cut into the plates by skilled workmen who have before them the original design or drawing reflected in a looking glass, as of course the reflected image must be followed out exactly in order that the final raised lettering on the bottle will match the drawing.

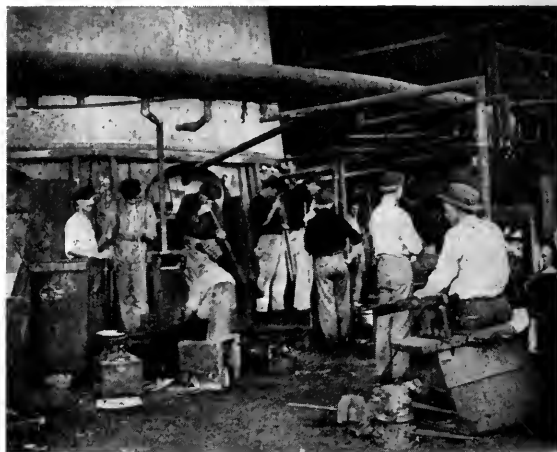
Each letter is punctured with a little air hole or vent which permits the air or steam to escape during the process of blowing, thus allowing the glass to fill the cavity completely and make a full, well-rounded letter or design.

When taken from the mold the bottle is placed on a pair of scales near-by to make certain that it is not over or under the allowed variation in weight. If it is up to requirements in this respect a "snapping-up" boy takes the bottle to a skilled workman or "gaffer" near-by, who is to finish shaping the lip. The neck is reheated by thrusting it into a "glory hole" in a small furnace for the purpose, and the gaffer then forms the lip by clamping a pair of specially made tongs over the neck and causing the rod to which the bottle is fastened to revolve rapidly up and

down the arm of his chair. A "carrying-in" boy then takes the bottle, or rather a number of them, for there are several completed between each trip, to the annealing oven, where the bottles are allowed to cool slowly, giving the glass the proper temper to withstand changes of temperature without cracking.

ANNEALING.

Annealing is one of the most important operations, for without it the glass would be very fragile and brittle—unannealed articles having been known to break and fly into a thousand pieces when placed in a draught of cooler air. The reason for this is that glass is to a certain degree a non-conductor, and when a bottle is made the surface of the glass cools first, forming a crystalline crust which shelters the interior molten mass, keeping it longer in the fluid state and preventing it from contracting as glass generally does when it cools. Thus the interior is in a state of tension, causing the breakage, which is always the result of poor annealing. Proper annealing will allow the glass to cool slowly and evenly, the whole vitreous mass being in harmony with itself, so to speak, and able to stand all ordinary changes of temperature.



A busy scene around a pot furnace.

The annealing oven or "lehr" is a tunnel-shaped structure 50 or 60 feet in length with the fire at the front or receiving end. The bottles are placed on a series of iron trays which are gradually moved farther back and renewed as they become filled. After about ten hours the bottles, having thus become gradually cooled by their slow progress toward the other end of the lehr, are taken out and packed into crates for shipping. If, in their passage through the lehr, they have

become smoked, they are first cleaned. The packer also discards all bottles that have noticeable and undesirable imperfections.

DEFECTS AND HOW THEY MAY BE OVERCOME.

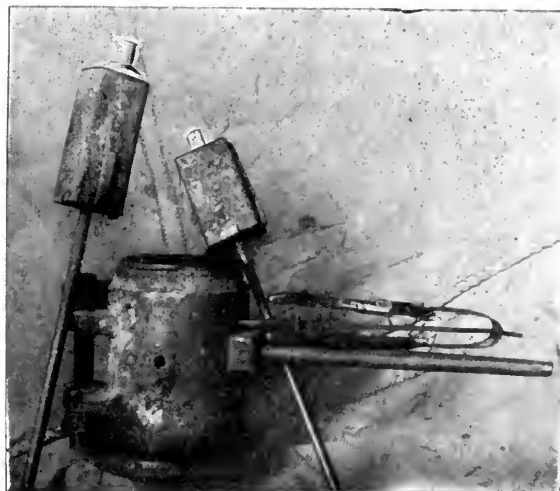
The first defect we shall take up, that of cracking, has already been dealt with from the manufacturer's standpoint. Let us now view it in the light of the druggist's actual experience. Very often it is necessary to pour a hot liquid into a glass container, with the result that the vessel, even though it has been perfectly annealed, will crack. The explanation for this is that the temperature of the inner surface of the vessel is suddenly raised, causing tension against the other cooler portions of the glass, which resist the sudden expansion of the part thus suddenly subjected to the heat. In other words, the inner heated layer is under compression while the rest of the glass surrounding it is under tension, and if this becomes sufficiently great the vessel will be shattered. Vessels of very thin glass, such as beakers or thin soda tumblers, can stand a change of this kind better than those of heavier walls, as the heat is conducted more quickly throughout the entire substance. No matter what the vessel may be, breakage of this kind may be prevented, as every one knows from experience, by gradually heating it up to the temperature of the liquid it is to contain. This is generally done by immersion in water which is slowly heated.

Another feature to be overcome is the corrosion, or white coating noticeable on bottles that have been stored for some time. This is caused by the moisture of the atmosphere, and the action is very rapid in a climate that is warm and moist. It is a fact that water has greater effect on glass than even most acids, but the exact explanation of the action is not fully known. Probably the trouble is due to a partial hydration of some of the silica or silicates. Often it is mistaken for devitrification, but this latter action is not known to occur at ordinary temperatures, although glass when heated in a flame frequently shows the phenomenon; it is, however, entirely distinct from the surface "corrosion" just described.

Moisture of the atmosphere condensing upon the surface of bottles, first has a dissolving action, drawing from the glass more or less alkali which almost always goes into solution as alkali hydrate, potassium or so-

dium hydrate. This alkaline solution absorbs carbonic acid from the air, and a carbonate of the alkali is formed, appearing as a coating of minute crystals. If this "efflorescence" has not become too far advanced, the bottle may be restored to its former condition by washing with water in which the crystals of carbonate of soda will dissolve, and the separated particles of silica will thus be released and washed away. Often a treatment of dilute sulphuric acid will be found beneficial when merely washing with water does not produce the desired results.

Prolonged exposure to light will affect all kinds of glass, the visible result being a change of color. Under such circumstances, glass containing manganese is especially apt to assume a purple or brown tinge, although radium radiations will have the same effect



Mold, snaps, and finishing tool. Showing how a bottle is held while the lip is being finished, and showing also the tool with which the "gaffer" shapes the lip.

on glass free from manganese. The action of light brings about certain chemical changes in glass which are very difficult to determine, although it is thought to be owing to a transfer of oxygen from one to another of the oxides found in glass. Examples of these changes are to be found especially in skylights where the prolonged action of the sun's rays has given a decided purple tint. This cannot be overcome, but it is a defect which rarely causes annoyance.

"Seedy" glass is common to all manufacturers, and owing to the many causes, which are too numerous to mention here, this feature is a problem every manufacturer has to face. Its eradication in all cases is impossible, but great care is taken to see that

the general run of ware is as free as possible from this defect. It is a fault, however, which does not at all interfere with the use of the bottle, although when filled with certain light-colored and non-transparent preparations the bottle does not present a pleasing appearance. This of course cannot be corrected by the druggist, as it is a feature incidental to the manufacture.

GRADUATES.

Another feature of glass manufacture of vital interest to the druggist is the art of making graduates of absolute accuracy. There has been a small demand for graduated prescription bottles for general purposes, but their inaccuracy, which is often very great owing to the varying amount of glass which changes the content of the bottle, has made them impracticable for measuring out prescriptions. The graduate, then, is absolutely necessary in prescription work, and in this day of required accuracy of weights and measures, fixed mechanical division, or graduation by marks in the mold, are utterly inadequate to meet the strict requirements of the law. The factory which has furnished all the data for this article was the first to see the necessity for producing a graduate of unquestionable accuracy, and for years their output has been and is recognized as the standard, each graduate being stamped with the guarantee.

The graduate "blanks" are made in almost the same manner as the prescription bottles described above, but with different finishing tools and considerably more hand-work by skilled labor. It is in the graduation of these

blanks, however, that the greatest skill and the most delicate mechanism is employed, as each separate mark is determined only after careful measurement, ascertained by filling the graduate with the required amount of water and then marking at the bottom of the meniscus when held at the exact level of the eye.

The work of measuring, though requiring unerring accuracy, is made quite simple by the special graduating apparatus devised and controlled by this factory; and, although thousands of measurements have to be separately determined daily, each one is ascertained with speed and precision which precludes the possibility of error. The guarantee of accuracy which goes with every graduate made by this process protects the druggist absolutely from errors arising from misplaced confidence in an inferior article. All measurements are based on the Liter of the International Bureau of Weights and Measures as the unit of volume, in accordance with the requirements of the U. S. Pharmacopœia, and are standard at 15° Cent. (59° Fahr.), the readings being made at the bottom of the meniscus.

The many other phases of the industry, such as chemical apparatus, ointment pots, tubing, homeopathic vials, stoppered ware, show jars, etc., made in the various departments of this factory, would each require exhaustive description, and will necessarily have to be omitted here. The industry is one of the oldest known to history and has developed along many lines, the one just described being next to window glass in importance in the progress of civilization.



A SPACIOUS TEXAS PHARMACY.—This represents the interesting establishment of W. G. Willman in Brownsville, Texas. Mr. Willman himself is presumably the gentleman standing at the right behind the telephone. Notice the roomy, well-ordered, and light-flooded character of the store. Mr. Willman is one of the most aggressive, energetic druggists in the State of Texas.

HOW I BUILT UP A DRUG BUSINESS.*

An Autobiography of an Average Druggist, Intended for the Profit and Entertainment of Other Average Druggists—The Story of how a Small Store in a Country Town was Gradually Developed into Something Pretty Good.

By FRANK FARRINGTON,

Delhi, N. Y.

(Concluded from June BULLETIN.)

CHAPTER VII.

SPECIAL LINES AND PROFITS.

While it is not as necessary in a full-price town for the druggist to have a good line of special agencies, it is always profitable.

There are plenty of city drug stores, especially those which do a large transient business, and in which the goods are sold almost entirely by clerks, the proprietor rarely coming in touch with customers, where the store can do but little toward introducing a line that is not advertised.

But the average store needs and will profit by individual lines of which it has the exclusive agency or of which it has some advantage in buying, such as getting the jobbing price.

Every store has the power of pushing special goods to some extent. If it has no special lines, that power is wasted on goods paying less profit or is not used at all.

Early in my experience, I decided that the exclusive agency proposition was worth working for, and I made it a point to get hold of every such proposition that I thought would prove profitable. Incidentally I secured some unprofitable ones.

The advertisement which is shown, headed "No one else sells them," shows some of the lines which we pushed successfully and for the most part exclusively.

A CANDY AGENCY.

When I set out to secure some agencies, that of Huyler's candies was the one I most wanted. I knew that I could not get it then as it was in the hands of the nearest competitor, who was doing a satisfactory business. But I wrote to the firm and told them that while I

realized that they could not give me the agency then, if there ever came a time when they wanted to make a change I wanted the first chance at it. The time came when Huyler felt that their Delhi agency was side-tracking them and pushing other lines too much. They came to me with an offer, which I took at once.

In the case of any coveted agency the above plan is a safe and good one to follow. I did something the same thing in the case of the Rexall agency. I was not ready to take it when I was solicited at first; so I put them off indefinitely, at the same time saying that I wanted them to give me the first chance at it when it came to the point where they felt they must close it up.

SPECIAL PATENTS.

I took the A. D. S. agency in its early days, and I took it before the Rexall because it required a good deal less money to handle, and I had none too much capital at the time. My idea in the case of the Rexall agency was to take it when it became necessary in order to prevent another store getting it, but to postpone the day as long as I could. After I got it I found that the postponement had been ill-advised. It is a good thing, and I ought to have had it sooner.

Lots of druggists put in a special line of goods and never make a cent on the proposition. They accept the agency. They pay for the first shipment and distribute a little advertising. They sell what goods people come in and ask for, and because the public does not ask for enough to move off the stock, the man who bought it gets sore on the line and wishes he never had stocked it.

In stocking the Rexall and the A. D. S. lines, however, I did not sit down and order

*Copyright, 1912, by Frank Farrington.

right down the list, some of everything. I picked out the best selling kinds of remedies and stocked those, became familiar with them, and started them wherever possible. Then from time to time I added new items as the opportunity offered, and developed trade gradually and carefully. Of course the representative of a manufacturing house is very apt to urge a man to put in pretty nearly all the different items so as to have them all and to be ready for every possible demand.

The demand for any proprietary preparation unknown to your public is only a possibility. It is scarcely that in some instances. And while a twelfth of a dozen or a sixth is only a small quantity, when that is multiplied by a score or more of items, it runs up into money just as surely as full dozens, though not so rapidly.

Any money at all tied up in goods for which there is no demand to-day—none until you create it—is money that is doing you no good and that is costing you its keep.

It has always been my policy to buy what I wanted to buy rather than what some one else wanted to sell.

Frequent window and inside displays were made of special line goods, using one article at a time and impressing upon the observer's mind that it was a good article and that it was backed by an absolute guarantee of "Money back for the asking."

The average druggist has a good, large personal acquaintance with whom he can be free to introduce a new article in the place of an old one. We never crowded anything on any customer or insisted in any degree. We gave each buyer the chance to choose between an advertised article asked for and not guaranteed and our special favorite not asked for but guaranteed to be equal or better in quality and returnable.

The Rexall line was treated about the same way in this connection, but the goods were placed in a section by themselves and displayed so as to attract as much attention as possible. The solid blue color of the section made the display conspicuous.

We used with care all the advertising sent us. As demand developed for items that we did not have, we stocked them, thus adjusting the stock to the requirements of the public we served.

A special line cannot be made to boom in

a week. You cannot boom such goods as one might be able to further the sale of a popular novelty. Its sale must be built up stone by stone. This requires salesmanship and good advertising judgment. The thing that creates a demand for the goods is advertising the individual articles one at a time in newspaper or window, and getting the literature into the families. Keeping right at this with no attempts at freak methods or spectacular stunts will get the business in time.

THREE GOOD LINES.

Three lines that proved very valuable to our country trade were a line of veterinary remedies, a line of poultry remedies, and a line of stock food. Some similar lines I believe should be carried by every drug store that wants the country trade. Too much of this kind of business is allowed to go to the country stores, the groceries, and the feed stores. The drug store might just as well have a share of it.

My initial stock of the veterinary line cost me \$50, selling for \$75. The company mailed advertising to a mailing list and furnished a first-class stock or veterinary book, bound in cloth and worth 50 cents or \$1. This book, one given out free to any stock-owner, sold the goods, though we helped in many ways.

The poultry line was also an exclusive agency proposition, and the original order was small, no special sum being stipulated to carry the agency. However, plenty of advertising was sent direct to our list, and this included a first-class poultry manual.

The stock food line was not an exclusive agency, though we made it so by pushing the goods, supplying mailing lists, and advertising the goods to such an extent that the other dealers soon quit keeping it. The manufacturers remitted us a \$2 credit check for each order that was sent into our territory to farmers buying direct. This method netted a clean additional profit of \$10 to \$16 a year.

I do not care to be understood as advertising any of these lines I mention. The makers of them have no pull that would induce me to say anything in their favor that was not true. Further than this, I will be glad to add to what I am writing here any further information that any druggist may care to ask me for if it can be given without requiring the detail of a long letter. If any

druggist cares to know more about anything mentioned in this series of articles, I hope he will put his inquiries in such form that they may be answered by simple replies. My only object in making this restriction is to avoid a labyrinth of correspondence into which I might have to venture to keep from appearing crusty and curt in answering inquiring friends.

HOW MUCH I MADE.

How much money did I make in the drug business? Well, I'm going to let you figure out a part of the answer for yourself.

January 1, 1908, my inventory was \$3439. Accounts receivable, \$457.

From that time until I sold out in May, 1911, my store expenses were unnecessarily heavy. That is, owing to the time required by outside work in the way of writing, etc., I was compelled to keep a licensed man in my store in addition to a junior clerk. My salary list was therefore about an average of \$25 for the two men when I could, by giving up any outside work, have got along equally well with a salary expense of not more than half that sum. That means that my store expenses were \$650 more than was necessary to do the same amount of business. Of this, however, I will take no further notice, and I merely mention it in order to show that the business paid this much more net profit than appears in the figures given.

My sales for 1908 were \$11,327, for 1909 \$12,164, for 1910 \$13,859—or a total of \$37,350.

In 1908, I bought goods amounting to \$8142, in 1909 to \$8204, in 1910 to \$9489—total, \$25,836.

My store expenses, including a yearly sal-

ary to myself of \$1000, were for 1908 \$2590, for 1909 \$2623, for 1910 \$2934—total, \$8148.

These figures show a percentage of gross profit for the three years of about 31 per cent and of net profit about 9 per cent.

If the above mentioned \$650 a year were added to the profits it would raise the percentage of the net to over 14, which is not to be sneezed at as net income from such an investment as the above.

However, I have taken no note of increase of stock in the above.

My inventory at the end of three years was \$4602—a gain of \$1163. Cash on hand and accounts due and other items of the business remaining substantially the same, this sum should be added to the profits of the business, which would raise the net from 14 to over 17 per cent.

ADVERTISING EXPENSE AT THE START.

My advertising expenses for 1908 were \$203, for 1909 \$180, for 1910 \$296. The increase the last year was due to the use of the premium plan, but the increase in the business, which was practically all attributable to this, I think is sufficient justification for the expenditure. This last year's advertising cost was but a trifle over 2 per cent, which is conceded a wise average.

The first four months of 1911 showed total sales of \$4720, as against corresponding sales of \$4202 for 1910. This was a more rapid rate of gain than 1910 showed—again chargeable to the premium plan. And since my sale of the business the continuance of the premium plan is producing further gains.

During all these years of business my book accounts averaged between \$400 and \$500,

No One Else Sells Them.

Here are some of our exclusive agencies.

These are the leading brands of goods in their respective lines and they can be obtained in Delhi only at our store.

The Rexall goods.
The A. D. S. remedies.
Vinol.
Dr. Roberts' veterinary remedies.
Huyler's candies.
Dutch Bittersweet candies.
Rat Snap (the best rat killer).
Conkey's Poultry Remedies.
International Stock Food.

Besides we are on Parke, Davis & Co's jobbing list, being special agents for their famous pharmaceuticals.

All these special lines are sold and guaranteed by us. They are the best goods made in these lines. We are the original penny post card people.

FARRINGTON'S DRUG STORE

Rexall

Every Live Town

needs a drug store that will carry a full line of Rexall Remedies.

Rexal Remedies are a line of high-class family medicines, one for every ill.

They are put up by the best house of its kind and are pure and reputable in every way.

We have put in the Rexall line.

We personally guarantee every article in the line.

On each package you find the printed warrant—"This preparation is guaranteed to give satisfaction. If it does not, come back and get your money. It belongs to you and we want you to have it."

That is the spirit of the makers of the Rexall line and that is OUR SPIRIT. We stand behind that guarantee.

You can buy Rexall Remedies only from us.

FARRINGTON'S DRUG STORE

(Liggett's Saturday Candy, 29c lb.)

Rexall

Rexall

You, Mr. Stockowner :

You are interested in keeping your stock well!

In order to get the best value out of stock of any kind, horses, cows, chickens, they must be kept well.

We are headquarters for the best goods to accomplish this result.

Dr. Roberts' Veterinary Remedies are the best of the kind for horses and cattle. We are now having a big demand for Cow Cleaners, Calf Cholera Remedy, Hard-Milking Outfit, Gums Killer, etc. These goods are in season and they are a necessity in every barn. We guarantee them and we never yet have had a complaint about Dr. Roberts' goods. Prices 50c up.

We have a full stock of the International Stock Food in all sizes which we sell at the same rates charged by the Company, 5 pails for the price of 4, delivered here. Also 25c, 50c and \$1.00 packages.

For Poultry we recommend the Conkey line as being the best going. Get a 25c package of "Laying Tonic" and count the eggs it produces!

Save your cash in order checks. Our cut glass offer us going to be good a long time.

FARRINGTON'S DRUG STORE

and usually a very large percentage of this was for goods supplied to the various county institutions which paid but once a year. My county bills ran as high for a year as \$225.

At the close of my business my book accounts amounted to \$564.67. The percentage of this which was not good was small. The total amount of accounts which I considered uncollectable, and these were what had accumulated during the life of the business, was \$101.10!

This figures out about seven one-hundredths of one per cent of the gross sales for the term of years. Part of this successful handling of accounts is due to the fact that I was made a good collector by reason of always needing the money. Part is due to the fact that I did not like to sell for credit and never encouraged any one to buy in that way. And another reason for the shortness of my accounts is that I shut a man off just as soon as he proved to be poor pay. If he could not pay and pay promptly I did not care for his business. Good goods on the shelves are better than poor accounts on the books.

THE SECRET OF MY SUCCESS.

If you want to know to what I attribute the success of my business I will reduce it to

the lowest common denominator, and say in short that I believe that having the goods and advertising them constantly was all the secret there was to it.

If a customer came in, as he did sometimes, and does in your store, and asked for "Fahrenheit's thermometer," I had Fahrenheit's for him.

If there was a call for Pepsin's gum, or Rexall's dyspepsia cure, if some young fellow wanted a pack of "ready-made" cigarettes, or a box of "Hooler's candy," I had the goods for them.

And speaking of mistakes of this sort, I once had a request for "poker chips to boil up for lice on cattle." I never did find out what that man wanted. Another customer wanted a bottle of Castoria for 25 cents. I asked her if it was Pitcher's. "No," she said, it didn't have any 'pitchers' on it, just plain printing." I gave her one with no pictures.

But whether a call was humorous or serious, we made it a point to have the goods—if not then, at least for the next demand. And we advertised them so persistently that there was no excuse for any one within trading distance of the store failing to know that we were there.

PLAYING FOR BIG STAKES.

A Bit of Fiction in which a Young Druggist is Made the Subject of a Practical Joke, and then Cleverly Uses the Situation to Win a High Wager.

By CAROLYN T. MASON.

With the assurance of one on a familiar footing in the establishment, Sam Merton, city editor of the *Brocton Eagle*, walked briskly into the large and successful drug store of his old friend and college chum, Bob Randall, and made his way to the desk in the corner of the back room where he felt reasonably sure of finding the proprietor.

"Hello, old man!" he exclaimed, bringing his hand down with energy upon his chum's broad shoulder. "I blew in to ask if you would do me a friendly turn."

Bob Randall pushed aside the inventory figures which had been absorbing his attention and wheeled around in his chair.

"What is it now, Sam?" he asked, with a

whimsical smile. "Want me to sell out and set you up in the newspaper business?"

"Not yet, Bob, although I will take your suggestion under consideration. This time I simply want to borrow your name."

"Good Heavens, Mert!" exclaimed his friend anxiously, "did any one ever tell you that you needed a nerve tonic? Take my money, take my business, take my clothes, but I call the limit on my *name*. It may not cut a large figure in the business world yet, but I have a sort of family feeling for it, you know."

"Oh, turn off the melodrama, Bob!" broke in Merton, laying down the ledger he had carefully aimed at his friend's head. "I said I simply wanted to *borrow* your name. I'll keep

it done up in cotton if you're so confounded afraid it will take cold. If you had held your breath a minute I'd have explained and saved you the loss of all that gas. It's this way: I want to go in for the *Chronicle's* prize. I feel sure I could land it, but the difficulty is that I wouldn't have a ghost of a show under my own name, for no matter how good my stuff might be, old Darnley is not such a fool as to advertise a competitor. Catch my idea? I've been itching to jump into the thing—test my powers, so to speak.

"The money," he added, with a shrug, "is a secondary consideration, although no doubt I could dispose of it if it happened to come my way."

Bob whistled cynically at Sam's protestation of unmercenary motives, then chuckled softly. "It *would* be a joke to carry off the prize under the old dried mackerel's nose," he mused thoughtfully.

"Mind, I don't promise to win," interposed Merton. "But I'll give those duffers a good run for their money."

"And you want *my* name," groaned Randall. "Well, I wouldn't trust it with everybody, but go ahead, son, and good luck to you." And Robert Randall turned again to his desk and to the figures which had been absorbing his attention. Nor did Sam Merton's singular proposal occur to him again until he ran across his friend some days later at the club.

"Well, old chap," he inquired, with a friendly dig in the ribs, "have you made my name immortal?"

"You bet!" returned Merton. "Joking aside, Bob, I laid myself out on that article, and if it isn't declared a winner old Darnley is a bigger blockhead than I take him for."

Two weeks elapsed, and Robert Randall hurried over to Merton's office at the *Eagle* one morning, triumphantly bearing aloft a mysterious long blue envelope the contents of which caused the effervescent city editor to clasp his friend in a stifling embrace and execute a few ecstatic waltz steps which ended in a bear's hug to the imminent peril of Randall's ribs.

"For Heaven's sake, Mert," Randall gasped when he had extricated himself, "have some respect for a man's anatomy. I'd like to take home one sound bone in my body!"

"Why consider a few bones when you're

happy? I would give half this check, Bob, to see Darnley's expression when he knew I had walked off with his first prize! But I guess we hadn't better put him next. We ought to have *some* consideration for the old chap's peace of mind."

A week later Merton was hurrying over to Randall's pharmacy in response to an imperious telephone summons. He found Bob excitedly pacing the back room, and as soon as he saw Merton he broke out in irritation:

"I say, Sam, that was a scurvy trick you played on me. I've done nothing for two days but answer that confounded telephone. First it's my picture they want, and next material for my biography, and then all the other blasted papers want 'articles from my pen.' You know I couldn't write three lines outside of a business letter if my life depended on it. I'm a druggist, not a long-haired literary freak! Hang it, stop grinning like an ape! I suppose you consider it funny to get a man in a rotten scrape like this!"

"It's a beastly shame, old fellow," said Merton consolingly, struggling to get his features under control. But finding the effort too great, he went off into another paroxysm of mirth at the tragic expression on his friend's face.

"Forgive me, Bob," he said contritely when he could get his breath; "but is a man to blame for creating a masterpiece?"

"Masterpiece be hanged! I've had to hire a stenographer to answer my mail. There's that cursed bell again! 'Hello. *Brockton Banner*? No, I have no more articles ready, and I *won't* have any. No, I can't be interviewed. What shall you tell your editor? Tell him to go to —!"' and Randall hung up the receiver with a bang. "Mert, if that thing rings again, I'll smash it."

"Now, Bob, don't get excited. Consider the reputation I've made for you and look at the advertising you're getting free—gratis—for nothing! It isn't for you to get sore. Greatest hit I've ever made, and *you* get the credit for it. Don't you see the *irony* of it?"

"Don't I," groaned Bob. "Have I seen anything else but the irony of it for the last 72 hours! Look at my nerves. I can't attend to business. I have to have my meals sent in. If I start for the club I'm dogged by interviewers. If I go to my lodgings the living-room is full of them. To get any peace of mind I've had to stay cooped up in this back room at my

desk. If this is what you literary chumps like, you're welcome to a gilt-edged monopoly!"

"See here, Bob, it's Saturday. You've got things fixed here in the store so you can get away. Let's run down to the country over Sunday and we'll think this thing out. Louise is down there with Betty this week, and they'll both be delighted to see you. I don't mind telling you, Bob, that I've got Louise to say 'yes' at last, and I'm not going to give her a chance to change her mind. You are to be the best man, old sport, and Darnley's check is going to put up just the best wedding journey ever."

Bob Randall mopped his forehead and removed the last trace of indignation from his usually serene brow. Suddenly he looked at Sam. "Have you told the girls about this fool prize business?" he asked.

"Why no," said Merton. "To tell the truth I didn't feel so blooming confident of winning out as I pretended to you. I thought I would spring it on them as a surprise when I ran down."

"Well, then, don't spring it this trip, Sammy, if you want to do me a favor. I'm too raw yet to stand any chaffing."

"All right, mum's the word, Bobby," agreed Merton.

The weather was ideal for July, and the two days passed rapidly. Under Betty Merton's eyes Bob forgot the burden of his sudden literary fame, although Sam couldn't resist approaching the tabooed topic at times. At dinner Sunday night Louise had innocently remarked: "This country air is what you need, Bob. I thought you looked worried and haggard when you came down."

Sam's eyes twinkled. "The fact is," he declared maliciously, "Bob is considering throwing over the drug business. He has had some flattering offers lately."

"Indeed!" exclaimed Louise interestedly, while Bob scowled. "What kind of offers?"

"Well, I'll let you in on a secret, but mind you don't babble. He is contemplating literature," said Sam in a stage whisper, serenely unmindful of Bob's black looks.

"Yes," growled Randall, "no sense in wearing your brain out with long hours in the drug business when an idiot like Sam can hold down an office chair at a princely salary!"

"How absurd!" drawled Betty wickedly as they left the table. "Bob couldn't write a story or an article if his life depended on it."

"What are you willing to wager on that assertion, Betty?" said Randall quietly, as he followed her to the moonlighted veranda. Sam and Louise were already vanishing down the garden path.

"Why, it wouldn't be fair to bet on a sure thing," the girl replied. If there was one thing Betty Merton enjoyed it was quarreling with Bob Randall. For two years she had tyrannized over him to her heart's content. She intended to surrender in the end, but she also intended to take her time about it. Meanwhile she carefully concealed her intention from the faithful Bob.

But to-night Bob was obstinate. "All's fair in war and something else, Betty, but I might have known you would weaken," he taunted.

"Oh, very well," she laughed carelessly. "Name the bet."

"We play for high stakes, Betty. If you see an article published over my signature within the next two weeks, you agree to become Mrs. Bob Randall within a reasonable period thereafter."

"Bob, are you quite sane?" gasped the incredulous Betty.

"Except on one subject," replied Bob significantly. "Come, are you game?"

Betty bridled at once. Bob seemed to be getting the best of the argument. Then, a sudden thought occurring to her, she cried: "I accept the wager with this amendment: That in case no such article is forthcoming the said Bob Randall shall refrain from making such a preposterous proposal to the said Betty Merton again."

"Done!" exclaimed Bob so quickly that Betty was piqued. Later on they were bidding one another good night.

"Betty," Bob whispered in the hall as she was starting up stairs, "how long is a *reasonable period*?"

Betty laughed nervously and then tossed her head. "By the way, Bob," she replied disdainfully, "there was no clause in that agreement that I should stay single for the next twenty years while you were waiting for a publisher." But Bob refused to be cast down, and only smiled happily.

The next morning Bob was so singularly

cheerful as the train rumbled into town that Sam was puzzled.

"Any one would think *you* had bagged a prize, Bob," said Sam, in a tone of inquiry.

"I have, my boy, and I don't mind telling you that I am sending a copy of that article to Betty by the first mail, and by special delivery at that!"

"MY BEST PAYING SIDE-LINE."

The Fifth of a Series of Important Articles—This Druggist Finds Optical Goods Very Profitable—He Tells How to Learn to Fit Glasses—The Stock and Apparatus Required—Other Practical Hints.

**By J. C. REESE,
Newton, Kansas.**

It would be hard to find a side-line for a druggist that would pay him better than optical goods. They yield 75 per cent gross profit, using as a basis \$2.75 for alumnico and \$5.00 for gold-filled goods. It does not require as much study as might be thought to be able to fit glasses properly. In from four to six weeks much can be done as a starter. To be able to fit a person satisfactorily when the other fellows have not been able to do so, is certainly very good advertising for the optometrist, for the person benefited will be a constant walking advertisement.

TAKE A CORRESPONDENCE COURSE.

One need not necessarily attend an optical college. While this is the better and more satisfactory way, a correspondence course will suffice. Or careful study from a good text-book will be a help. I certainly recommend the college course. There are courses offered by reputable colleges of from four to eight weeks which are very good. In this length of time a great deal can be learned, three times as much as could be accomplished by studying from a text-book. These courses cost usually \$25; with other expenses, the total is from \$50 to \$100, according to the personal taste. Correspondence courses usually cost from \$15 to \$25. If one wishes to study at home there are no better books than "Refraction and How to Refract," by Thornington. His book is very concise, covering the ground completely, with no waste of words. The cost is \$1.50. I also recommend "The Optician's Manual," Volumes 1 and 2. These books are also very good, among the very best I know of. They go into detail on all subjects. I certainly would get these three books for home

study, costing \$4.00 for the three volumes. The Optician's Manual is published by the Keystone Publishing Co., of Philadelphia, but can be obtained from any optical house, as can the Thornington book. Hartridge on Refraction is also a very good book.

The study of optics is quite an interesting



J. C. Reese.

one and *pays great big profits*. I make 75 per cent gross profit, less a per cent of doing business of say 25 per cent, which would yield 50 per cent *net*. Is there any side-line that would make a better showing?

APPARATUS.

Now as to stock and equipment. In the first place a trial case is indispensable. It costs

from \$35 to \$75. One costing \$60 is good enough for anybody.

In the next place I certainly would get the mediaometer outfit, made by Merry Optical Co., Kansas City, Mo. This costs \$100 and consists of the instrument, a mediaometer, an adjustable table, and an electric-lighted test chart with three of the best style test cards. A Geneva pocket lens measurer is very handy, but this could be dispensed with as the same results can be obtained by the use of the trial case lenses—*i.e.*, by neutralizing with opposite signs. This is very slow as compared with the measurer. The cost of the instrument is \$6.50.

These are all the instruments that are necessary at first. As proficiency is acquired other instruments, such as the ophthalmoscope, retinoscope, etc., can be added. I want to state here before finishing with the instruments that the purchase of the mediaometer will be your best investment because of its advertising features. The table is optional as well as the chart. If you have a well-lighted room, other styles of test charts or cards will do. But by the use of this instrument, the time required for testing is small compared to the regular trial case method. Consequently the nervous strain on a patient is nothing. I test a compound astigmatic eye in twenty minutes. With the ordinary method it requires from one to two hours. And another very important point, with this instrument we use the fogging system best. This does away with any cycloplegic such as atropine, cocaine, etc., with its discomforts and dangers. This instrument is your best advertisement. It will pay for itself in two months. It is one of your best talking points in your advertising.

Now as to stock, I recommend 1 eye, size 0 for children and 00 for adults. Start in on

1 dozen 1/10 12k. gold-filled comfort temple riding bows.....	\$ 8.10
1 dozen Alumnico comfort temple riding bows	3.65
1 dozen cable temples, gold-filled, 1/10 12k.	3.60
1 dozen cable temples Alumnico....	2.20
1 dozen wire temples, 1/10 12k. gold-filled	2.40

\$19.95

The above in 0 and 00 size eyes assorted	19.95
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Bridges N to N 2½ Sadler bridge system	\$39.00
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1 dozen 1/10 12k. gold-filled, comfort temple, riding bow, 00 size, rimless frames*	7.60
1 dozen rimless nose-glass mountings, 251 to 274, all sizes†.....	10.00
54 pairs (18 different strengths) lenses of assorted sizes, beveled edge, periscopic, first quality 0 eye at \$1.85 per dozen pair.....	8.33
54 pairs 00 size beveled edge (etc.) at \$2.05 per dozen pair.....	9.23
54 pairs 00 eye, 3-hole, rimless, periscopic, first quality, at \$2.30 dozen pair	10.35
½ gross leather R. B. cases, lettered	8.80
½ gross leather eye-glass cases, lettered	8.80

For children you can order the lenses and frames from some near-by optical house as well as the bifocals for old people. A person can get along very well with this list given. Of course there will be other things that you will want as is learned by experience. Some tools are required, such as a screw-driver, some different kinds of pliers, extra screws, etc. As to the strengths of lenses to carry, get ¼ dozen pair each of the following: plus 0.25, plus 0.50, plus 0.75, plus 1.00, plus 1.50, plus 1.75, plus 2.00, plus 2.25, plus 2.50, plus 2.75, plus 3.00, plus 3.25, plus 3.50, plus 4.00, plus 4.50, plus 5.00, plus 5.50.

TOTAL OUTLAY.

Mediaometer and test cabinet, illuminated.....	\$ 75.00
Trial set, \$35.00 to \$75.00.....	59.00
Lens measure.....	6.50
	<hr/>
	\$140.50

2 sizes gold-filled frame temples (extra).....	\$ 39.90
Rimless frames.....	7.60
Rimless nose-glasses.....	10.00
0 eye lenses.....	8.33
00 eye lenses.....	9.23
00 rimless lenses.....	10.35
1 gross cases.....	17.60

\$103.01

140.50

\$243.51

Books	4.00
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\$247.51

I want to say as a last word, *advertise*. It pays—and pays well!

*These to be used as matter of choice.

†There is quite a variety of good ones. I use "Sure-On" and "Everybody's" mountings.

BATHING CAPS IN THE WINDOW.

By B. S. COOBAN.

Chicago people are fond of bathing on the beach along Lake Michigan. Many live so near the water that they find it feasible to put their bathing suits on at home and stroll down to the lake for a swim. In the summer they may be seen walking toward the shore

false faces were covered with this head-dress, adding a touch of life and humor to what might have been a somewhat flat display. The base of the window was carpeted with light-green cheese-cloth. One face peered out at passers-by from over the top of a barrel while



all ready for the fun. The women are quite as numerous as the men, and of course they must have rubber caps to shield their hair from the water.

Not long ago I arranged a display of these bathing caps in the window. A glance at the illustration shows the scheme. Several

others were seen scattered among the caps. Across the top of the trims were three signs: Bathing Caps, Keep Your Hair Dry, From 15 cents to 50. The caps were of several colors and were supported on blocks of wood. Of course these did not cost anything to speak of. The trim was cheap, but effective.

RUBAIYAT OF THE DYSPEPTIC.

By CLEO CONSTANCE LONG.

Now summer comes again and with it thirst,
I'd drink an ice-cream soda if I durst;
But no, I must not gaze upon the stuff,
For verily I am a man accurs't.

Myself when young did eagerly frequent
The soda fount, and drank with much content
A frothy ice-cream soda, full of fruit;
But now—a pepsin punch for mine, or creme de menthe.

And this reviving herb, whose tender green
Peeps from the frosty cup, o'er which I lean—
Ah, feed upon it lightly, for who knows
What cholera morbus germs may lurk unseen!

I sometimes think that never grows so red
A cherry as those tactfully spread
About the soda fountain to attract;
But no—they shall not make me lose my head!

And when they offer me that darker drink,
And claim it will not put me on the blink,
I simply turn away and shed a tear—
Beef tea! from which my very soul doth shrink.

Oh, thou, who dost with soda water fizz
Beset the path I take to reach my biz,
Thou shalt not tempt me with Banana Flip—
Plain malted milk is best for rheumatiz.

DOLLAR IDEAS

PASTE FOR STICKING LABELS ON TIN.

Harry S. Noel, Williamstown, Mass.: I have used square cocoa cans as drug containers, and have improved the appearance of these cans by covering them entirely with brown paper. As an adhesive agent I use a paste made according to the following formula; it will stick closer than a brother. For its adhesive properties on tin and for general store use it is to be highly recommended. Moreover, it is cheap and easy to make.

Flour16 ounces.
 Boracic acid.....4 scruples.
 Water64 fluidounces.
 Nitric acid.....4 fluidrachms.
 Glycerin3 fluidounces.
 Oil of cloves, sufficient quantity.

To the flour and boric acid add the water, which should be cold, slowly, stirring to make a smooth paste. Successively add the glycerin and nitric acid and bring slowly to a boil. If necessary, the paste may be strained through a coarse sieve while it is thin. This will add to the appearance and do away with small lumps. The oil of cloves is added to the finished product.

This paste has been used to cover both round and square tin cocoa cans with brown paper. The papers make the tins appear uniform. These cans are used as drug containers, the brown making a good background for the white labels.

The paste works very well on collapsible tubes and tin ointment boxes. It keeps well. It may be stored in empty snuff jars or some such containers.

DISPENSING OILS IN CAPSULES.

James L. Tuohy, Salem, N. J.: Many druggists who do not carry the regular empty capsules for oils and occasionally have a call for oils or other liquids to be dispensed in capsules will find the following plan a great help. It is impossible to seal the slip-over tops on the capsules with water as some try to do.

I use the number one capsule for 5 minims. Drop the 5 minims of oil in each cap first, then fill the capsules with starch or sugar of milk, put on the cap, and the powder will absorb all the oil so that you will have no trouble. I have tried this with terebene, balsam of copaiba, and similar materials.

CONSTRUCTING A DRAINING-BOARD.

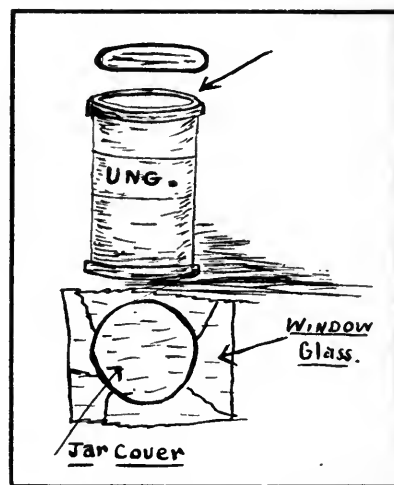
W. B. Camburn, Owosso, Mich.: A most valuable fixture in our back room, near the sink, is a draining-board which we devised. After building two shelves 1½ feet wide by 4 feet long, we had a tinner make a large pan for each. These are built of galvanized iron, and are therefore rust-proof. The sides are five inches high. The bottom is corrugated, so that bottles leaned against the sides do not slip or slide down.

The pans slant to one end, where a pipe drains the water into a pail underneath the lower pan. These pans are good for drying not only bottles, but also mortars, graduates, funnels, etc.

AN IMPROVED OINTMENT JAR COVER.

Mrs. H. Kalliwoda, Ph.C., San Francisco, Cal.: Often an ointment pot cover is broken. Sometimes the cover is so tall that the jar will not fit between the shelving. As a remedy I suggest the use of a piece of window glass. It forms a neat, dust-proof, and sanitary cover.

Upon a sheet of paper draw a circle the size of the top of the ointment pot. Take a



piece of old window glass, place it over the circle, and with a glass-cutter trace the line on the glass. From the circle to the edges of the glass cut three or four strokes, as shown in the illustration.

Now tap the scrap pieces, breaking them from the circle, and you have a sanitary cover. The ointment adhering to the top edge of the pot holds the cover so that it will not fall off unless with a slow sliding motion.

PROFITS AND EARNINGS

A NET PROFIT OF NOTHING AT ALL!

Here is a peculiar statement sent in by a druggist in Minnesota:

Original capital, April 1, 1911.....	\$ 3,185 00
Invoice January 1, 1912.....	10,889 60
Fixture invoice.....	1,441 70
Purchases	22,830 88
Expenses:	
Light	\$ 103 48
Advertising	214 59
Postage	22 29
Rent	720 00
Salaries	2,646 04
Miscellaneous	837 64
Sales	16,865 66
Book accounts.....	1,343 58

Now this is apparently a business which was started last year on the first of April. It was either a new store begun from the ground up, or else an old store bought by the present proprietor. The foregoing statement covers the business for the following nine months of the year, until January 1, 1912. In the meantime the stock was greatly increased.

Taking the statement at its face value, we find that on January 1 the inventory of stock showed \$10,889.60, and the inventory of fixtures \$1441.70—a total valuation of \$12,331.30. When the business was started nine months before, however, the stock and fixture account represented a valuation of only \$3185, so that an increase was registered of \$9146.30.

In the meantime the purchases amounted to \$22,830.88. Of this amount, \$9146.30, as above shown, went into the stock and fixture account, so that the cost of the goods actually sold was apparently \$13,684.58. The total sales, including the item of book accounts, was \$18,209.24. Subtracting what the goods cost from what they brought, we have a gross profit left of \$4524.66. The expenses in the meantime were \$4544.04, so that the expenses entirely swallowed up the gross profits and nothing was left at all in the way of net profit!

Now we may have erred in the analysis of this man's statement. His facts are not given with sufficient completeness. It is possible, for instance, that the inventory fixture item of \$1441.70 should not have been considered in our effort to discover what part of the purchases for 1911 went into the permanent investment. Perhaps some of these fixtures,

now valued at \$1441.70, were not in the store when it was started, but were purchased subsequently during the nine months covered by the statement. In this event it may be that our correspondent, making such purchases of fixtures, considered this a permanent investment and did not include the figures in his item of purchases amounting to \$22,830.88. To the extent that this may have been done are our deductions misleading. Such a consideration, however, seems unlikely, and the figures would not be changed very greatly, anyhow.

Assuming that we are correct, our correspondent has made gross profits only of \$4524.66, amounting to the very low figure of 25 per cent. This is poor. The expenses, on the other hand, are also 25 per cent, which is probably a fair average for a business of this size, but so large in this particular case that it absorbs the gross profits entirely, leaving nothing in the way of net profits. If in the meantime the item of proprietor's salary is perchance not included in the expense account, then the owner of the business himself has failed even to get his own wage from the store, and has in fact worked nine months for nothing. There would be some hope for him, with a new and growing business, if the percentage of gross profit were greater. He ought to get more money for his stuff.

As we have said, however, the statement may be misleading in some respects, and our comments based upon it may therefore be somewhat inaccurate. In any event it would look as if the business so far was not particularly profitable. As a final remark we would call attention to the rent item of \$60 a month. In the other business statement commented on this month the rent is \$20 a month, and yet the two businesses are practically of the same size.

A NET PROFIT OF ELEVEN PER CENT.

A druggist in Texas submits the following statement of his business for 1911 with the request that we analyze and comment upon it:

Stock inventory January 1, 1911.....	\$ 6,025 00
Stock inventory January 1, 1912.....	6,485 00
Furniture and fixtures January 1, 1911.....	2,452 00
Furniture and fixtures January 1, 1912.....	2,531.00
Total sales 1911.....	16,800 00
Purchases 1911.....	12,139 00
Expenses	1,451 60
Freight	371 60
I. & D. Dr.....	182 30
Personal account	1,150 00
Rent at current rate (own building).....	240 00

Now we shall have to do a good deal of figuring before we can get at the heart-throbs of this statement. Let us find out first what the actual cost was of the goods sold during 1911. Purchases are given in the statement at \$12,139. We must first add to this the freight item of \$371, for freight is really a part of the cost of the goods and should always be charged to the merchandise account—it is not an expense. We then have a total of \$12,510. We find, however, upon comparing the stock inventory figures for 1911 and 1912, that there was an increase amounting to \$460. Goods costing this much money, therefore, went into the permanent stock and were not sold during 1911. Subtracting this from \$12,510, representing the total cost of purchases, we have a residuum of \$12,050. This is what the goods cost which were sold during the year.

Subtracting \$12,050 from the sales of \$16,800, we find gross profits of \$4750. The next thing to do is to subtract from the gross profits the item of total expenses, in order to find out what the net profits were. But we must first get at this item of expense accurately. Our correspondent has put down expenses of \$1451.60, but he has failed to add his own salary as he should. This is apparently the \$1150 which he calls his "personal account." It appears, too, that he owns the building, and that he has charged himself an annual rental of \$240, which he assumes to be the current rate. Adding together, then, these three items of (1) expense, (2) proprietor's salary, and (3) rent, we have total expenses of \$2841.

Subtracting \$2841 from the gross profits of \$4750 we find net profits of \$1909. Adding to these net profits of \$1909 the item of proprietor's salary, amounting to \$1150, we have a total income from the business of \$3059. This is not bad as things go, but still there are some rather peculiar features of this business.

In the first place, the percentage of gross profit is very low. It amounts only to 28 per cent. Our correspondent is located in a small town in Texas where prices ought to be pretty good, and where gross profits of 28 per cent seem to us very meager. Anything less than 30 per cent is certainly most unsatisfactory, and the aim should be to get up over the 35 mark as much as possible. The compensatory fact, however, is that the percentage of expense is also low. It amounts only to 17 per cent, so

that the percentage of net profit is 11. This, it must be confessed, is very fair. Anything over 10 must be considered satisfactory.

An expense of 17 per cent, however, is so small that we almost question its accuracy. We wonder if it can be true, and if a lot of things have not failed to be properly recorded? The rental of \$20 a month, for instance, seems to us very low for a store big enough to permit a business of \$17,000 a year. Our correspondent should check up our calculations of his returns from the business with the actual accumulation of cash, and thus see that the figures are supported. We find that his net profits are \$1909. This amount of actual money, above and beyond his own salary of \$1150, should have accumulated in real cash, barring the \$460 increase in the stock inventory and \$79 increase in the fixture inventory. The "I. & D." item of \$182.30 we have ignored entirely in making these comments, for the simple reason that we do not know what it means.

LETTERS

HERE'S A NOVELTY FOR A SIDE-LINE.

To the Editors:

I read the BULLETIN with a great deal of interest, and I have been following the series of articles this year on side-lines. I have tried out many which others have tried—sometimes with success and sometimes with failure. I wish especially to testify to the very great interest I took in those articles on the truss question in May, and while they were all good the first prize winner in that contest is doomed to be a successful man, for his ideas and conclusions are absolutely clear and convincing.

But now about side-lines. I wish to say I have one that is peculiar to myself. It is so especially my own, indeed, that I doubt the usefulness of mentioning it, as I do not suppose many men could adopt it. However, I will tell you about it and you can use your own judgment about offering it to your readers. You had better not publish my name, though, lest some one have me arrested for getting goods under false pretenses.

I got married a great many years ago, and in so doing I possessed myself of a black broadcloth suit and a stovepipe hat. Being

of a very quiet and reserved disposition, and being tired of the frivolities of life, I married a woman many years older than myself, and this, too, added to my reserve, for I had to live up to both that suit and my wife's age. I thus acquired early in life a very solemn and sanctified appearance.

At different times, on visits and on vacation trips, I noticed that other travelers among the ladies, getting acquainted with my wife, would take it for granted that I was a minister and would immediately launch into fervid conversations about the beauties of a religious life, etc., and generally wind up with asking her at what place I preached. The younger women, looking upon my comely countenance, and noting my ministerial air, made no bones of coming to me for answers to all kinds of questions, and they opened their hearts to me in an amazing way. In the long waits between trains at the stations this afforded much pleasure, and the only drawback was the stern and unrelenting eye that my wife fixed on me when she inquired how it happened that I knew so many young women in every station we stopped at.

Now for the side-line part of this story. In various purchases made in different towns along the route of our travels, I noticed that the clerks always quoted me the usual price, and then, with an air of kindness, knocked off a quarter or a half dollar on every purchase of a dollar or two, with the remark that "to you the price is so and so."

I took the goods, pocketed the money, and kept still. I suspected that it was my looks that got the reductions, but I did not dare to ask, till finally the answer came from a man who had sold me several fine shirts. He finished up the transaction by knocking off a very liberal amount, remarking that it was customary to sell their goods at cost to ministers.

Since then I have preserved this suit with care, and periodically I brush up the good old stovepipe hat. When my wardrobe gets below zero, and I feel it is necessary to replenish it rather liberally, I get out the suit and all the accessories, hie me to the nearest big town, and there I save many a dollar in buying supplies. And there also I take pleasure in walking many a block with some gentle maiden, trying to direct her to some store or place I never heard of before just because she has pinned her faith to my looks!

It's a great side-line, and I feel for you, my friends, when I recognize the impossibility of your using it to advantage.

MAN-AFRAID-OF-HIS-NAME.

HERR BODEMANN DOESN'T AGREE WITH US.

To the Editors:

Don't feel hard if I read the BULLETIN with an eye on the wing, and tell you when I think you are wrong according to my notions.

1. Look at the last line in the second column of page 240 of the June BULLETIN. How does your contributor, Mr. Kalliwoda, figure out a percentage profit of 38.5? Did you think because he was figuring on a hair-raising tonic you could afford a hair-raising bull of this kind?

2. Now for your editorials on pages 226 and 227 of the June BULLETIN. I for one have never given any mercantile agency any figures whatever of my standing; don't know how I am rated, if at all, and don't give a damn. I have seen too many instances where high-priced credit men were fooled by the rating given on first-class risks, and so I pass these so-called raters up. The raters come around, in earning their wages, about so often—and get no explanation whatever from me. If mercantile houses don't want to trust me, that's their business, and it doesn't bother me in the least. I don't approve of your calling those who feel as I do hard names! A few years ago a fellow who sailed under my name, but who gave a West side store address, soaked some of the largest houses—some of the most conservative houses—to the tune of \$35,000. And these houses had high-priced credit men, were subscribers to Bradstreet and Dun, and did not know where they were at—until they began to "Dun" me, and then they learned that they had been "dun" badly. That's why!

Even if I am a foolish man, for doing as I do, does not paragraph 1913 of Article 22½ of the U. S. Constitution vouchsafe me the happiness of making a fool of myself if I want to?

WILHELM BODEMANN.

Chicago, Ill.

[NOTE BY THE EDITORS.—To this characteristic roast from Herr Bodemann we may briefly reply as follows:

1. The percentage of profit mentioned in Mr. Kalliwoda's article was, through a typographical mistake,

given as 38.5 instead of 385. The decimal point was misplaced—that's all.

2. We certainly do not agree with Mr. Bodemann about refusing all information to credit-rating agencies like Dun and Bradstreet. Nowadays practically all business is done on credit, and a merchant whose rating is not given or known need not be surprised if he meets with all sorts of difficulties. He cannot blame jobbers, manufacturers, and others if they refuse to give him credit, or at least subject him to embarrassing questions. Mr. Bodemann himself is so well known that his case is not a characteristic one at all. His reputation is so much a matter of common knowledge that no one would refuse him credit. The mere fact that a man using his name secured so much credit is no argument against the skill of credit men nor the value of credit information. The credit men were simply taken off their guard—that's all. They thought there was only one Wilhelm Bodemann, and without troubling to look up the facts they assumed that he was worth anything up to a million dollars!

THE GRADUATION PREREQUISITE IN NEW JERSEY.

To the Editors:

I beg to direct your attention to your article "Prerequisite in New Jersey," May issue, page 180.

In connection with this I want to say that you have been misinformed as to the facts. You lay the cause of the failure of our graduation prerequisite bill to the doors of, as you state, "two rival institutions." This is altogether wrong.

As dean of one of the institutions accused, I assure you that there was not one person present representing our college at the hearing before the Legislative Committee. Furthermore, both institutions have been and are now a unit in the quest of the prerequisite idea.

The opposition arguments were not conducted by any person connected with either institution. Any unfavorable impression made upon the committee was caused by arguments against the bill by people who themselves are pharmacy graduates, and one of whom at one time was even a member of the Board of Pharmacy of New Jersey.

I hope I have removed the stigma from the colleges in New Jersey that you have inadvertently placed upon them, and I will at the same time ask you to state in your next issue that the colleges of pharmacy in New Jersey are a unit on the graduation prerequisite in New Jersey.

During the past session of the legislature of

New Jersey, Senate Bill Number 305 was passed by both houses and signed by His Excellency Gov. Woodrow Wilson. This bill establishes as a prerequisite a definite entrance requirement for all the colleges of pharmacy in the State, under the supervision of the State Board of Education. We hope this will prove to be the means of removing the opposition to the graduation prerequisite.

HERMAN J. LOHMANN,

Dean, Department of Pharmacy, University of the State of New Jersey.

Jersey City.

TRY A HAND AT THIS ONE.

To the Editors:

The accompanying order was taken to several stores, and finally it landed in the pharmacy of Mr. Williams, Goldsboro, N. C. Mr. Williams' very efficient prescription clerk, Mr.

20 Cts worth of Bastard Camphor
20 Cts worth of oil of Heliot
20 Cts worth of oil of sweet wood
20 Cts worth of Sweet Spirits Nitro
10 Cts worth of Sulfuric Zemel
10 Cts worth of Sugar of Plaster
Cash \$ 1.00,
Jules fill this order read Careful

Henry Brown, succeeded in giving the customer exactly what he wanted. I suggest that you reproduce this order in the BULLETIN and see if other readers of the journal can figure it out.

JAMES W. COPPEDGE.

TO "FIX" PAINT ON OIL-CLOTH.

To the Editors:

I notice that "H. L. S." in the May BULLETIN asks for a paint for oil-cloth. If he will "size" the oil-cloth first by rubbing it quite thoroughly with a rag soaked in turpentine, the paint will not "creep."

S. S. ELLIS.

Sergeant Bluff, Iowa.

To the Editors:

I like the BULLETIN OF PHARMACY better than any other drug periodical that I ever have taken, and my clerks think as I do.

T. R. DUNN.

Neches, Texas.

THE SODA FOUNTAIN.

"HOW TO OPERATE A SMALL SODA FOUNTAIN ON A MONEY-MAKING BASIS."

Charles L. Berry recently contributed a prize paper to *The Soda Fountain* on this subject. It was full of helpful hints for dispensers. He said:

Three essentials must be emphasized in discussing "How to Operate a Small Soda Fountain on a Money-Making Basis"—and the first of these is *cleanliness*. This means a clean fountain, clean glasses and clean dispensers. Not only must all be clean, but this cleanliness must be made the key-note of the advertising of the fountain.

Have your window strips changed frequently, and emphasize these facts:

That you have a sanitary fountain.

That you use only sterilized glasses.

That your syrups are drawn from thoroughly clean receptacles.

Never let the counter remain sticky—clean it with a damp cloth or sponge and rub dry with a towel.

THE SECOND ESSENTIAL.

Good syrups and fruits. Do not depend upon the boy to make the syrups; the least you can do is to oversee every step in the process.

As chocolate is the big seller at every fountain a good formula for chocolate syrup will not come amiss here. But in making chocolate syrup never lose sight of the fact that there is almost if not quite as much in the preparation of the syrup as there is in the materials used. Here is a good formula:

Fountain chocolate	8 ounces.
Granulated sugar	5 pounds.
Water	40 ounces.
Extract vanilla	4 ounces.

Mix the chocolate and the sugar, put the water in a gallon container and boil. After the water comes to a boil add the mixture of chocolate and sugar and stir constantly over the fire for 15 minutes. Then add the extract of vanilla and enough rock candy syrup to make a gallon.

In serving chocolate always add a couple of tablespoonfuls of sweet cream to the glass, and always stir with a spoon before using the fine stream. The addition of the sweet cream improves all soda with the exception of phosphates or syrups containing acids.

BE LIBERAL.

Don't be parsimonious with your syrups, as I have found in my many years of soda experience that the average American has a sweet tooth and likes his soda rather sweet. This is especially true of the ladies. Try and have your customers go away satisfied. If they leave soda in the glass or part of the sundae in the cup find out what was wrong with it. Ask if it was too sweet or not sweet enough, and *make it right*. Never let a dissatisfied customer leave your store.

Have a good variety of drinks and fruits so you can satisfy every customer. Americans are fond of variety and are of many tastes, and to these you must cater to succeed. Have all the popular crushed fruits, and run a special now and then—but when you do let the people know you have it by window signs, strips, or the use of a blackboard. There is always some one

around an establishment who can do a little amateur sign painting, but if there is no one, call in outside talent even if you have to pay 50 or 75 cents. It is always money well spent.

Use fresh fruits in season, and sometimes a little out of season.

Nut sundaes have become "quite the rage," and they must be served in several ways. Walnut with maple is the favorite at most fountains, but many people like nuts in other combinations, and sweet, ground nuts should be kept on hand for these customers.

In serving chocolate sundae always use the dark thick syrup. A good way to serve this favorite is to have the chocolate heated in a chafing dish and pour it hot over the ice cream. It becomes solidified and gives the sundae the appearance of being iced like a chocolate cake. Always use the chocolate marketed under the name of "special dark."

Lemon is another hot weather favorite. Do not try to make a cheap lemon by grating the peel and adding acid to get the required degree of sourness—take fresh lemons and squeeze the juice, using 12 ounces to the gallon of rock candy syrup.

THE THIRD ESSENTIAL.

Good service. The soda must not be served by every Tom, Dick, and Harry about the place. The dispenser should know how to serve a customer. When we talk of a small fountain we do not think of the professional soda dispenser. He is an adjunct of the larger fountains. We mean the soda should be served by a clerk and not by a porter or store roustabout. The service should be prompt. The present-day American is a hurry-up personage and must be served rapidly, yet carefully.

See that the clerk is equipped with a spotless coat and apron, that he has a clean collar, shirt, and hands. Never allow the clerk to serve a customer and then disappear behind a prescription case or the cigar stand. The average buyer often wants another drink, and he will not bother to call the clerk, but will walk out without ordering for the second time, and the fountain will be out just that much revenue. This is especially true when two or more are together at the fountain and one of them wishes to reciprocate, as he has just enjoyed a drink paid for by the other fellow.

The greatest income from the American saloon can be traced to the treating habit. Why should not the soda dispenser take advantage of this trait in his customers and reap his just dues?

Have your drinks cold, and in warm weather keep a bowl of cracked ice near at hand and put a little in every drink you serve, especially the flat drinks and phosphates. You will find that the most frequent kick at the fountain is that the drink is not cold enough. Ice is cheap, and a bowlful shaved in the morning will last nearly all day.

So there are the three essentials—*cleanliness, good fruits and syrups and good service*. Let the people know that you insist upon all three.

SOME FOUNTAIN PLACARDS.

"Soda, as cold as ice can make it."

"Chocolate—made right, served right, tastes good, 5 cents."

"Weather 95 degrees—Our Soda 34 degrees."

"We have your favorite drink at our fountain and we serve it just as you like it."

"A lemon phosphate will touch that thirsty spot, 5 cents."

"Sundaes—Plenty of ice cream, plenty of fruit, 10 cents."

"Ice cream soda—deliciously flavored, deliciously served—ever try ours?"

"What will you have? A cherry sundae with rich, red cherries? 10 cents."

"Are you thirsty? It's only a few steps to the fountain."

"Chocolate ice-cream soda. Sounds good, but tastes better. 10 cents."

"A drink for every fancy. At the fountain."

"All that's latest—all that's good—at the fountain."

"Egg drinks! Fresh eggs—pure fruit syrups—good, rich cream and plenty of ice."

"Orangeade! Yellow as gold and just as good."

"If you appreciate good soda you'll appreciate ours."

FOR PREPARING LEMON BEVERAGES.

We realize many of our readers are familiar with the lemon, its use, and the various methods of producing good syrup from the fresh fruit. But it will not be out of place if, for the benefit of new dispensers, we devote some space to the subject. E. F. White has had considerable experience in the various methods of handling lemons at the fountain and tells about them in *The Spatula*. To quote:

LEMON JUICE.

It is always well to keep lemon juice on hand in a 'squir-top bottle. Lemon juice, to be kept in this way, should immediately after expression be run through a fine strainer to remove the pulp and seeds, etc., and then filtered through paper. Juice thus prepared will keep fresh for several days. A dash or two of this juice is quite an addition to many plain and fancy drinks, and is also convenient for serving seltzer and lemon or similar drinks.

LEMON SYRUP FROM THE FRUIT.

Select from 8 to 12 fine, juicy lemons, according to the size (I generally find a dozen of the average lemons are none too many, although a good syrup may be made from less). Grate six or eight of them, taking care to grate only the yellow part of the rind, into a good-sized mortar. Over the gratings pour half an ounce of alcohol and rub for a few minutes with the pestle to cut the oil. The alcohol can be omitted if desired, but in either case proceed as follows: Add 4 ounces of sugar to the gratings and rub thoroughly with the pestle so that the sugar may absorb the oil. If needed, more sugar may be added. Over this pour the lemon juice which has been previously expressed and add 1 ounce of solution of citric acid. Let this stand over night if possible, and after straining through a double thickness of cheese-cloth, add enough simple syrup to make one gallon.

LEMONADE SYRUP.

Occasionally some one desires a method for preparing lemonade and wishes to have a syrup for the

purpose. This can be done by adding the juice of 30 or 40 lemons to a gallon of lemon syrup prepared as indicated in the foregoing. More or less lemons may be used according to the strength you desire the lemonade to be. Unless this syrup can be used up each day it will be best to filter the juice.

MINERAL WATER LEMONADES.

You will often have calls for lemonades made from the various mineral waters, therefore you should be prepared to dispense them. They are prepared in the same way as a plain or soda lemon, depending upon whether plain or carbonated water is used. All that you have to do is to keep a bottle or two of the various mineral waters on hand.

DRAWING THE LEMONADE.

Into a 12-ounce glass draw from 1 to 1½ ounces of simple syrup. Into this squeeze the juice of one fair sized lemon, and fill the glass one-third full of finely shaved ice. For plain lemonade fill the glass full of pure, clear water, and shake thoroughly. For soda or other charged water lemonade fill with the desired water and mix with a spoon. Decorate with a slice of lemon or any other fruit that you may have on hand.

MAKING ICES.

"Water ices," says the *International Confectioner*, "are by far the simplest to make, and in the summer are even more refreshing than ice cream if properly made. Most of them are too sweet and insipid, while others lack the distinct fresh fruit flavor. Berries, citrus fruits, and pineapples lend themselves to best advantage in making ices. The mistake most prevalent in making ices is that they are raised or swelled as ice cream should be. To prevent this, run the freezer at very slow speed, and use double the amount of salt, so that the batch will have a good body. A quart of unsweetened condensed milk will improve the body also, if added to a five-gallon batch.

"To get a fruit acid in solution so that the exact quantity can always be used, place two pounds of citric acid crystals in a half-gallon jar and fill with filtered water. Shake this occasionally so that all will be dissolved when it is ready for use.

"As a filler for ices, white of eggs may be used instead of gelatin. They must be beaten enough to break up the stringy property and mixed with the batch before it is strained. Eight egg whites should answer for a ten-gallon batch, or one ounce of egg albumen soaked over night in enough water to cover it will be equivalent, and is used the same way as the fresh whites of egg. On the other hand, use half as much gelatin as you would for the same sized batch of ice cream; for instance, a ten-gallon batch of cream is made up of five gallons of material, and we use, say, four ounces of gelatin, but the ices being frozen without the raise or swell will give only five and one-half gallons in the result from the same quantity of mix. Hence less filler is required. French ice cream needs no filler, as it is not to be raised; in fact, if too much body is used, the cream will be so heavy that it will cause trouble in packing.

"If it is not possible to get reduced speed from the motor in use, have the blades on the dasher cut off close to the center and then retin the whole to prevent rust. It is these blades which beat up the material, and if removed the result will be similar to the French or centrifugal freezer.

"Ices are made in the proportion of one quart of water to one pound of sugar, on the average, the sugar used in the fruit being figured in the batch, and to each gallon one fluidounce of acid solution. An idea of this can be gained from the following example of five gallons:

LEMON ICE.

Eighteen quarts filtered water.
Eighteen pounds granulated sugar.
Eighteen lemons.
Five fluidounces acid solution.
One ounce gelatin, or whites of four eggs.
One quart unsweetened condensed milk. (Optional.)

"The lemons are first prepared by grating the rind and mixing it with two pounds of the sugar, allowing it to stand over night to draw the flavor. The water is then heated, and when it is nearly to a boil, remove it from the fire and add the sugar, stirring till dissolved, then the sugar in which the lemon rind is grated, and then the gelatin; cool this and add the juice of the lemons and the rest of the ingredients, strain, and freeze.

"Orange ice is made after the same formula, substituting oranges for the lemons, and adding orange or yellow color to suit the taste.

"Berries used in ices need not be prepared with sugar as for ice cream, and less sugar is to be used, probably twelve ounces to the quart of batch according to the sweetness of the berries, and fruit acid to suit the taste. The acid will accentuate the flavor if used judiciously, and when the proper proportion is had it should be noted so that the amount is always used.

"When coloring ices be particular to color the batch before adding the acid, else a pronounced bitterness will appear, due to the action of the acid on the color; but if it is first colored, the dilution will be great enough to nullify the effects when the acid is added. The chief trouble on this score will be found in orange, regardless of the brand, as all certified colors are made of the same basic material, but if the above directions are followed, little or no trouble will be experienced.

GRAPE ICE.

"Grape ice is increasing in popularity, being made on the same principle as orange or lemon, and using about four to six ounces of the juice to a quart batch. Color with a blend of red and violet colors to simulate the natural color of the fruit juice.

"When it is desired to incorporate the fruit in the ices, either sliced or crushed, the juice should be drained off and frozen with the batch, and the fruit added afterwards; else when the batch is in liquid form the fruit will settle to the bottom. Another way to mix it thoroughly is to remove the cover from the freezer after the batch is nearly frozen and add the fruit, then putting back on the machine to finish.

"The shade of color desired will be a matter of experiment, for the shade changes after the batch is frozen, some getting darker and others lighter. It is best to study this for proper results."

A NEAT SODA MENU.

James S. Gleghorn, manager of the Quality Drug Company of Waynesburg, Pa., sends us one of his soda menus. The paper is a light tan, the ink purple,

<p>Menu (Continued)</p> <p>Specials</p> <hr/> <p>Mineral Waters of all kinds. Grape Juice and imported and domestic Ginger Ale.</p> <p>Ice Cream, Ices and Fruit Punches All flavors supplied in any quantity on short notice at reasonable prices. When you entertain, let the QUALITY supply your wants.</p> <p>Our Guarantee We guarantee everything dispensed by us to be the purest and best money can buy, and to conform to the pure food and drug law enacted by the National Congress in 1906—the most stringent act ever passed on the subject. So you'll know "It's Good If You Get It At The QUALITY."</p> <p>Our Soda Served in Sterilized Glasses</p>	<p>The Quality Frozen Dainties</p>  <p>Soda There's no such Soda anywhere else that we know of. We're extravagant in putting good things into it.</p> <p>Reminder It's good if you get it at the QUALITY—the popular place.</p> <p>Our Candies Always fresh.</p> <p>Something New Sodas and Sundae in boxes—take one home.</p> <p>Quality Drug Company James S. Gleghorn, Manager</p>
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The cover pages of Mr. Gleghorn's soda menu.

making a very pretty color combination. The inside and outside pages are seen in the accompanying etchings.

It will be noticed from the cover that Mr. Gleghorn is selling sodas and sundaes in boxes. Other

<p>Menu</p> <p>Ice Cream Soda, 10 Cents</p> <table border="0"> <tr> <td>Vanilla</td> <td>Chocolate</td> </tr> <tr> <td>Pineapple</td> <td>Strawberry</td> </tr> <tr> <td>Raspberry</td> <td>Lemon</td> </tr> <tr> <td>Orange</td> <td>Peach</td> </tr> <tr> <td>Cherry</td> <td>Nectar</td> </tr> <tr> <td>Sarsaparilla</td> <td>Banana</td> </tr> <tr> <td>Ginger</td> <td>Coffee</td> </tr> <tr> <td>Maple</td> <td></td> </tr> </table> <p><i>Crushed Fruit Served with Ice Cream Soda</i></p> <p>Egg Drinks, 10 and 15 Cents</p> <p>Egg Orange Phosphate Egg Lemon Phosphate Egg La Orgeat Egg Chocolate Egg Coffee Egg Lemonade Egg Malted Milk</p> <p>Old Reliable 5 Cent Drinks <i>Made from Pure Fruit Juices</i></p> <table border="0"> <tr> <td>Wintergreen</td> <td>Pineapple</td> </tr> <tr> <td>Strawberry</td> <td>Cherry</td> </tr> <tr> <td>Chocolate</td> <td>Ginger</td> </tr> <tr> <td>Coca Cola</td> <td>Vanilla</td> </tr> <tr> <td>Sarsaparilla</td> <td>Nectar</td> </tr> <tr> <td>Coffee</td> <td>Peach</td> </tr> <tr> <td>Orange</td> <td>Orangeade</td> </tr> <tr> <td>Lime Juice and Cola</td> <td>Limeade</td> </tr> </table> <p><i>Strictly Sanitary Service</i></p>	Vanilla	Chocolate	Pineapple	Strawberry	Raspberry	Lemon	Orange	Peach	Cherry	Nectar	Sarsaparilla	Banana	Ginger	Coffee	Maple		Wintergreen	Pineapple	Strawberry	Cherry	Chocolate	Ginger	Coca Cola	Vanilla	Sarsaparilla	Nectar	Coffee	Peach	Orange	Orangeade	Lime Juice and Cola	Limeade	<p>Menu (Continued)</p> <p>Specialties, 10, 15 and 25 Cents</p> <table border="0"> <tr> <td>Milk Punch</td> <td>Tutti Frutti Bon Bon</td> </tr> <tr> <td>Mint Frappe</td> <td>Cocktail a La Quality</td> </tr> <tr> <td>Soda Cocktail</td> <td>Pineapple Smash</td> </tr> <tr> <td>Hon. Pom Fizz</td> <td>Cherry Cocktail</td> </tr> <tr> <td>Chocolate Puff</td> <td>Jungle Bon Bon</td> </tr> <tr> <td>College Special</td> <td>Floating Island</td> </tr> <tr> <td>Cherry Bon Bon</td> <td>Lemon Squash</td> </tr> <tr> <td>Humpty Dumpty</td> <td>Peach Blow</td> </tr> <tr> <td>Walton House Glass</td> <td>Lemon Fizz</td> </tr> </table> <p>Plain and Mixed Ice Cream, 10 Cents</p> <p>Sundaes and College Ices, 10 Cents</p> <p>Mar. Garden Sundae Maple Walnut Sundae Chop Suey Sundae Pineapple College Ice Oriental Sundae Fruit Sundae Peach College Ice Raspberry Sundae Buffalo Nut Sundae Strawberry Sundae Quality Sundae</p> <p><i>No Ice Cream Served for Less than 10 Cents, excepting to Children</i></p> <p><i>Red Cross Sanitary Iceless Fountain</i></p>	Milk Punch	Tutti Frutti Bon Bon	Mint Frappe	Cocktail a La Quality	Soda Cocktail	Pineapple Smash	Hon. Pom Fizz	Cherry Cocktail	Chocolate Puff	Jungle Bon Bon	College Special	Floating Island	Cherry Bon Bon	Lemon Squash	Humpty Dumpty	Peach Blow	Walton House Glass	Lemon Fizz
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The inside pages of Mr. Gleghorn's soda menu.

druggists have tried that scheme and say it works out very well. The people in the vicinity soon acquire the habit of taking home a few ice-cream sodas to their families and friends.

BUSINESS HINTS

Two Specimens.—

The Physicians' Pharmacy Co. of Youngstown, Ohio, has a remittance blank for paying bills that

QUALITY STORE

The Physicians Pharmacy Co.
Prescription Pharmacists
230 North Bridge Street
Youngstown, Ohio

Gentleman: Enclosed find check for \$ _____ in payment
For Invoice dated _____
For Statement in full to _____ Total _____

Less: % Discount \$ _____
Less Freight \$ _____
Less Overcharge \$ _____
Less Credit Memo's \$ _____
Less Advances for _____ \$ _____

Total \$ _____
Net Balance \$ _____

Very truly yours,
THE PHYSICIANS PHARMACY CO.
BY _____

A remittance blank used by the Physicians' Pharmacy Co.

leaves little room for misunderstanding on the part of the recipient. It indicates just what deductions have been made. Full data of the invoice are given,

The Physicians Pharmacy Co.
230 N. Phelps St. Youngstown, O.
CALL 1357 AND USE OUR FREE MESSENGER SERVICE.

No. _____ Date _____
Dr. _____ Price _____
For _____

SHAKE WELL BEFORE USING

A prescription label for typewritten directions.

as may be seen from the accompanying reproduction of the blank. The original is 6 by 9½ inches.

A neat label is employed by this firm for prescrip-

tions. We are reproducing it in the original size. The directions are typewritten, completing a very presentable package.

Co-operating with Good Housekeeping Magazine.—

It seems the *Good Housekeeping Magazine* is giving special attention to the different kinds of goods that are consumed in the household. With Dr. Wiley as contributing editor this journal is in a position to serve the public in an advisory capacity and indicate the different products that are wholesome in their composition. Owen Raymo, of Wayne, Mich., along



A reproduction of the two inside pages of the folder distributed by Mr. Raymo.

with scores of other druggists, is making capital out of *Good Housekeeping's* campaign. He distributes a four-page folder intended to attract buyers. The products mentioned bear the guarantee of *Good Housekeeping*, as may be seen from the two inside pages shown in the accompanying reproduction. The dimensions of the original circular are six by nine inches.

Never Say, "Is That All?" to Your Customer.—

"Is that all?" The customers winced. It was almost imperceptible, yet they winced, and to the close observer it was easily seen that the words made them feel uncomfortable. They had purchased a small article in the drug store, and the words fell on their ears in a manner that indicated that the salesman was surprised that they were not going to buy anything else.

Haven't you noticed it? says L. C. Wareham in *The Pill*. Don't you remember how harsh the words sounded to you? Made you feel sort of ashamed that your purchase was a five-cent one of salts, castor oil, etc., and that you were taking up the salesman's time and that you ought to feel indebted to him, didn't it? The man behind the counter in this instance evidently didn't mean to be discourteous, but he was.

"Now, is there anything else?" Try this phrase and see how much better it is, after waiting on a customer, to gently lower the voice, incline the head slightly and say with a pleasing expression, while looking at your patron: "Now, is there anything else?" And remember not to say, "Is that all?"

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Astute Annotations.—

A German patent says that hydrogen peroxide is rendered stable by the addition of at least 10 per cent of alcohol.

Rubber sheets, bands, etc., are said to have their strength and elasticity increased by exposure to ultraviolet rays for a short time.

Seeds soaked in formaldehyde solution, then heated, are distributed through cultivated land for the purpose of destroying insects, according to an English patent.

The hot gases which issue from volcanic grounds in Tuscany are found to be strongly radioactive and to possess considerable electrical energy.

The manufacture of synthetic sapphires, from oxides of aluminum, iron, and titanium, which are claimed to have the same color, transparency, and hardness as the natural stones, is the subject of a recent patent.

Formaldehyde in solution acts as a poison to plants, but when plants are exposed to formaldehyde gas in minute quantities it is found that starch is formed directly from the formaldehyde.

About one-eighth of the energy of metabolism is furnished by the liver and one-twelfth by the kidneys.

Frogs were found to be affected by colchicine 50 times as much at 98° F. as at warmer temperature.

The sense of smell is rendered more acute by the administration of strychnine, and also by cocaine, in its first action.

One gramme of radium produces 0.1 cubic millimeter of helium per day under normal conditions.

Metallic sodium, enclosed in iron tubes, is proposed for a conductor of electricity in place of copper.

The violet end of the spectrum gives the best light for near objects, and the red end for distant objects, for distinct vision.

When boiled in a one-per-cent solution of colloidal silver, wool and silk are dyed brown, and cotton is dyed yellow. The colors are nearly permanent.

The average yearly production of nux vomica seeds in India is estimated at four million pounds, and valued



THE RECENT MISSISSIPPI FLOODS.—Here is another view of country that suffered from the recent Mississippi overflow. The half-tone is reproduced from a post-card sent to us by the People's Drug Store, Plaquemine, La. It shows the condition of the river front there after the storm and during high water. The one-story structure on the left was wrecked.

at \$100,000. The United States uses more of them than any other country.

Pure gelatin has only about half the gelatinizing power of a gelatin-containing salt, and the jelly is more opaque.

Zirconium oxide is recommended as a dusting powder for protecting wounds, etc., and also as a substitute for bismuth salt in x-ray work.

Diamonds—very minute ones—have been made by reducing illuminating gas with mercury at a temperature of 100° C.

Radium salts are readily absorbed by colloidal substances, and are more soluble in weak solutions of colloids (gums, etc.) than in pure water.

Profitable Sickness.—

R. C. Treat says that ambergris is caused by pieces of cuttlefish beaks which are swallowed by the sperm whale, and which cause an irritation in the intestines, and this, in turn, causes a secretion to form around the piece of bone. The beaks of cuttlefish are always found, he states, in unbroken lumps of ambergris. Lumps of ambergris have been found weighing from 130 to 274 pounds.

Colloidal Explanations.—

J. Hoffman claims that the color of ultramarine is due to the presence of colloidal sulphur rather than to a definite chemical compound. Yellow, brown, and green ultramarines are produced by adding boron or selenium or tellurium to ultramarines, but the color does not depend either upon the particular one which is added or on its amount, except in part.

Don't be Slow!—

H. Schade thinks that gall-stones are formed by the very slow deposit of colloid emulsions. When colloids are mixed very slowly, drop by drop, they tend to form crystalline spherical masses, the larger stones being deposited the more slowly.

Stay, Bill!—

The decomposition of glycerophosphates by water is first increased then decreased by acids, according to the amount present. The most stable form is that in which enough acid is present to correspond to an acid-glycerophosphate. Heat also favors decomposition.



THE RECENT MISSISSIPPI FLOODS.—Among the places that suffered from the recent overflow of the Mississippi River was Arkansas City, Arkansas. In Dedman's Drug Store, which is located on the bank of the river there, the water was thirty inches deep. J. A. Still, the manager, says it was necessary to suspend business for over two weeks.

BOOKS

A BOOK ON PHARMACEUTICAL BACTERIOLOGY.

At the present time nearly all of the leading colleges of pharmacy give instruction in bacteriology. In many of these institutions the courses are compulsory, forming a part of a prescribed curriculum. Not infrequently the lectures are supplemented by laboratory work, although students of pharmacy do not always have time to devote themselves to special laboratory methods and technique. There has developed, therefore, a course on what we might term pharmaceutical bacteriology, a study that is suitably adapted to the needs of the pharmacist.

Albert Schneider, M.D., Ph.D., has just brought out a book entitled "Pharmaceutical Bacteriology," bearing especially on the subjects of disinfection and sterilization. It aims to give the druggist a fair knowledge of general bacteriology, in order that he may comprehend quite fully the significance of these minute organisms in pharmaceutical practice. He should know what pharmaceutical preparations and what medicinal substances are likely to be attacked by bacteria, and what changes they are capable of producing in such substances. He should be qualified to sterilize his pharmaceuticals. He should know something of disinfectants and antiseptics.

To give druggists a knowledge of such things has been the aim of Dr. Schneider in this volume. The book is well edited and handsomely illustrated. It gives the student a general knowledge of phagocytosis, of leucocytosis in inflammatory processes and in pus formation. The chapter on immunity is extremely interesting. Several pages are devoted to bacterial vaccines, enzymes, opsonins, and antitoxins. The various hygienic measures which should be known to a druggist are also described.

"Pharmaceutical Bacteriology" is published by P. Blakiston's Son & Co., Philadelphia. The price is \$2.00 net.

MICROSCOPY.

"Microscopy and the Microscopical Examination of Drugs" is the title of a new book by Charles E. Gabel, B.S., Ph.D. Dr. Gabel is Microscopical Food and Drug Analyst for the Iowa State Dairy and Food Commission, and is therefore well equipped to produce a work of this character. He attempts to simplify, condense, and present the fundamentals of microscopy, a very laudable purpose, since the importance of microscopy and microscopical methods has greatly increased in recent years.

Dr. Gabel's book is intended especially for the use of the pharmacist and medical student. It practically covers the work for microscopy and histological pharmacognosy as suggested by the National Committee in the Pharmaceutical Syllabus. It serves also as an introduction to the various microscopical studies and methods used by modern physicians, health officers, and

pure food and drug men. There are 115 pages bound in cloth. The book is published by The Kenyon Co., of Des Moines, Iowa.

A BOOK ON COMMERCIAL PHARMACY.

D. Charles O'Connor, at one time a retail druggist in Fitchburg, Mass., but now in the employ of F. F. Ingram & Co., is the author of "A Treatise on Commercial Pharmacy," published by the J. B. Lippincott Company of Philadelphia. The book is quite an ambitious one of nearly 400 pages. The text is divided into three main parts, devoted respectively to the establishment of a pharmacy, the management of a pharmacy, and the development of a pharmacy. Under each head are many subdivisions, so that in all there are exactly 50 chapters. Such important subjects are discussed as taking care of stock, figuring profits, establishing a bookkeeping system, the treatment of customers, the buying of goods, the selling of goods, advertising methods, window displays, special sales, booming different departments in the store, and the like. The volume is mainly intended as the analogue of treatises on dispensing pharmacy which are used as text-books in the schools, but it will be found of service also to the proprietor already in business who is anxious to reorganize and improve his methods. So far as we know, it is the first comprehensive book devoted to the subject of commercial pharmacy. The price is \$2.50.

"FORMULÆ MAGISTRALES GERMANICÆ."

This book corresponds in a way to our National Formulary. The formulas are of recognized value and aim in many instances to provide the apothecary with the recipes for what are called "factory-made proprietaries."

The arrangement is somewhat different from that of the American work. The formulas are classified into therapeutic rather than pharmaceutical divisions. The chapters are headed "diaphoretics," "disinfectants," etc., whereas in the National Formulary one section is devoted to elixirs, another to ointments, and so on.

The various preparations are made up of medications which clinical experience has shown to be of service in medical practice. In the preface the physician is urged to prescribe the preparations of "Formulæ Magistrales," showing that the N. F. and U. S. P. propaganda in America is characteristic of a movement world-wide in its scope. Apparently the same agitation goes on among the German apothecaries.

"Formulæ Magistrales Germanicæ" is published by the Deutschen Apotheker-Verein in Berlin.

PHARMACEUTICAL LATIN.

"Pharmaceutical Latin," by Julius William Sturmer, Phar.D., is now in its second edition. This book aims to present a course sufficiently extensive for the needs of American prescription practice, and at the same time in harmony with the Pharmaceutical Syllabus. The second edition has several improvements over the pre-

vious one. The article on prescription Latin has been considerably enlarged. The chapter on verb forms has also been made more complete, while the number of Latin exercises has been increased. In the back of the book is a brief Latin-English dictionary for pharmacists. This work is published by the author, J. W. Sturmer, and the retail price is \$1.25. Dr. Sturmer is Professor of Pharmacy in Purdue University, Lafayette, Indiana.

TANNER ON POISONS.

The necessity of printing another edition of this very popular little manual presented the opportunity for revision. Dr. Tanner has made several changes in his memoranda on poisons, including notes of several synthetics used as substitutes for morphine. The toxicology of poisonous foods is presented and antidotes given for all deadly chemicals. This book is published by P. Blakiston's Son & Co., of Philadelphia.

REPORT OF THE MISSOURI BOTANICAL GARDEN.

The Twenty-second Annual Report of the Missouri Botanical Garden for 1911, by William Trelease, Director, St. Louis, Mo., has just been issued. The present

volume is fully up to the standard set by earlier editions of the series which have been reviewed in these columns. Besides the reports of the Garden officials, it contains six scientific papers. Dr. Trelease himself has three papers on the genus *Agave*, illustrated with 86 plates, in which he describes and names 22 new species and one new variety. He has also one paper on *Yucca*, in which he describes two new species and three new varieties, illustrating the paper with five plates. Dr. C. S. Sargent describes 14 new species and one new variety of *Cratægus* from Missouri. Mr. David Griffiths describes 10 new species of the genus *Opuntia*, illustrating these with 17 plates.

HAMPSHIRE'S VOLUMETRIC ANALYSIS.

Any pharmacist who is called upon to do analytical work must depend to a great extent upon his knowledge of quantitative determinations. Charles H. Hampshire, B.Sc., A.I.C., of London, has recently written a book on volumetric analysis especially intended for druggists and students of general chemistry. Methods of estimating acids and alkalis are given together with percentage determinations of the more common metals. The work is published by P. Blakiston's Son & Co., of Philadelphia. There are 104 pages and the price is \$1.25 net.



A LEADING SOUTHERN STORE.—One of the most remarkable retail businesses in the South is that of J. J. Schott, at 2015 and 2017 Market Street, Galveston, Texas. It is a common saying in Galveston and vicinity: "If you want anything unusual, go to Schott's for it!" He keeps an enormous stock, and physicians have grown to look to him for putting in the newer scientific products as fast as they are marketed. His prescription business is one of the big features of the establishment, and this department alone would satisfy the average druggist. From 250 to 300 prescriptions are dispensed daily. Every department in the store, however, is equally successful, and progress and growth are characteristic of the Schott business in every detail. Incidentally it may be remarked that Mr. Schott has the reputation of being the most distinguished follower of Isaac Walton on Galveston Island.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Hair Dyes.

W. P. M. wants a formula for a brown and a black hair dye. The following formula is said to stain the hair brown:

Nutgalls	50 grammes.
Water	300 grammes.
Ferrous sulphate	10 grammes.

Boil the nutgalls in the water, strain, in the colate dissolve the iron salt, and evaporate the liquid to two-thirds its original volume.

The following is said to yield a dye which stains the hair brown immediately upon application:

Gallic acid	10 grammes.
Ferric chloride	8 grammes.
Water	100 grammes.
Acetic acid	8 grammes.

Dissolve the acid and the ferric chloride in the water. Add the acetic acid shortly before applying. The hair must be thoroughly washed in order to deprive it of fat and dried before applying the dye.

White hair is said to be dyed brown by the following:

Red wine	120 grammes.
Ferrous sulphate	3 grammes.

Boil for one minute. Apply to the hair twice a week, and let it dry after every application until the desired result is obtained.

Black.—(a) Sulphate of iron, 10 grains; glycerin, 1 ounce; water, 1 pint. The hair must be thoroughly washed with this mixture, dried, and brushed once daily for three days; then the following preparation (b) should be applied, on a small-toothed comb, but it should not be allowed to touch the skin if the other preparation has done so, as a temporary stain would result: (b) Gallic acid, 4 grains; tannic acid, 4 grains; water, 1½ ounces. After the first application of formula (a) the hair should be allowed to dry, and then be brushed. Subsequently, both formulas may be used once daily, at an interval of an hour or so, until a black color is produced.

The silver hair dyes are harmless and quick in action. Here is a two-bottle preparation that is found in a reliable book:

NO. 1 BOTTLE.

Pyrogallie acid	½ drachm.
Sodium metasilphite	10 grains.
Water to make	2 ounces.

NO. 2 BOTTLE.

Silver nitrate	1 scruple.
Stronger ammonia water, a sufficient quantity.	
Water to make	2 ounces.

Dissolve the nitrate in ½ ounce of water, add ammonia until the precipitate is redissolved, and make up to 2 ounces with water.

Two-bottle hair dyes are put up in cases to hold a 1-ounce (No. 1) and a 2-ounce (No. 2), or proportionately larger bottles, with two short-handled tooth-

brushes of black and white bristle. The directions for use are as follows:

Cleanse the hair from all grease by washing it with warm water having a little washing-soda dissolved in it, and dry with a towel. Next pour a little of fluid No. 1 into a saucer and apply with the white-haired brush; immediately afterwards use No. 2 in the same way with the black brush, avoiding as much as possible touching the skin. Wipe the parts around the hair receiving the dye with a damp sponge, and do not wash or grease the hair for several hours after its application. It is preferable to apply the dye at night.

The more silver there is in the preparation, the darker the dye is. Five grains of nitrate to the ounce is the proportion for brown dye.

Some Interesting Incompatibilities Explained.

A. & Co. submits two prescriptions and asks that we discuss their incompatibilities fully. The formulas are as follows:

(1) Calomel	15 grains.
Sodium bicarbonate	20 grains.
Powdered rhubarb	15 grains.
Powdered potassium chlorate	15 grains.
Alain	5 grains.

Mix and make 12 capsules.

(2) Quinine bisulphate	100 grains.
Fowler's solution	2½ drachms.
Syrup of orange peel	2 ounces.
Water to make	4 ounces.

Mix and make solution.

Our correspondent asks, referring to prescription number 1: "Would the calomel and potassium chlorate form bichloride of mercury, and if so, in what proportions. In number 2 the Fowler's solution appears to throw down the quinine bisulphate. Why does this take place? A small quantity of dilute hydrochloric acid will redissolve the quinine, but is not this addition likely to precipitate the arsenic in the Fowler's solution?"

"Do you consider it safe for a druggist to dispense these prescriptions? Is it ever wise to send out a prescription in which are both Fowler's solution and one of the common acids?"

"Kindly suggest a complete work on incompatibilities and give the name and address of the publisher."

In prescription number 1, there would be no reaction while the powders were in a dry form. When taken into the stomach the potassium chlorate with the hydrochloric acid of the gastric juice would undoubtedly oxidize the calomel, forming mercuric chloride. This change would take place slowly, and possibly the drugs would pass out of the stomach before it could develop. Ruddiman says, about a very similar prescription, that "when the calomel and potassium chlorate were mixed with a 4-per-cent solution of hydrochloric acid and the mixture allowed to stand for some time, tests for mercuric chloride could be obtained. Although this may be considered a rather dangerous prescription, it has been filled and taken without apparent effect." From this we should judge the chemical change was more theoretical than actual.

In "Scoville's Art of Compounding" the statement is made that sodium bicarbonate with calomel forms corrosive sublimate, the change not taking place within four to six weeks, so that, except under unusual conditions, any prescription would be used before mercuric

chloride is formed. It is a very common practice of physicians to direct the use of these two chemicals together, and no ill effect seems to have resulted.

Passing now to prescription number 2, precipitation is of course due to the excess of potassium carbonate, quinine alkaloid being precipitated, which our querist redissolves with hydrochloric acid. In making the Fowler's solution, an excess of potassium bicarbonate is used in dissolving the As_2O_3 . On boiling the As_2O_3 goes into solution as potassium arsenite, and the excess bicarbonate is converted into carbonate. The trouble is therefore due to the carbonate and not the arsenic. The hydrochloric acid puts the quinine back into solution and also makes a good solvent for the arsenic instead of precipitating it. Some effervescence is noted, due to the decomposition of the carbonate. To avoid any difficulties, we call our querist's attention to the two official arsenic solutions, both of which contain 1-per-cent As_2O_3 . But Fowler's solution is alkaline while the solution of arsenous acid is acid. If our querist will use the latter in his prescription, he will have no trouble to contend with, and in my opinion would not be taking any undue liberties with the physicians. It is up to the druggist to correct such an incompatibility in a physician's prescription.

A complete work on "Incompatibilities" is a book by that name published by John Wiley & Sons, New York and London. The author is Edsel A. Ruddiman, Ph.M., M.D. There are 312 pages. The price is \$2.00 in cloth.

Lacquers for Brass.

C. F. S. writes: "I want the formula of a preparation to prevent brass from tarnishing. I believe such a product is used by manufacturers of brass beds, the brass being coated with it after it has been polished to protect the metal from air and moisture."

Here are five formulas of lacquers for brass:

1. Seed-lac, dragon's-blood, annatto, and gamboge, of each 4 ounces; saffron, 1 ounce; alcohol, 10 pints.
2. Turmeric, 1 pound; annatto, 2 ounces; shellac and gum juniper, of each 12 ounces; alcohol, 12 ounces.
3. Seed-lac, 6 ounces; dragon's-blood, 40 grains; amber and copal, triturated in a mortar, 2 ounces; extract of red saunders, $\frac{1}{2}$ drachm; Oriental saffron, 36 grains; coarsely powdered glass, 4 ounces; absolute alcohol, 40 ounces. Very fine.
4. Seed-lac, 3 ounces; amber and gamboge, of each 2 ounces; extract of red saunders, $\frac{1}{2}$ drachm; dragon's-blood, 1 drachm; saffron, $\frac{1}{2}$ drachm; alcohol, 2 pints 4 ounces.
5. Turmeric, 6 drachms; saffron, 15 grains; hot alcohol, 1 pint; draw the tincture, and add gamboge, 6 drachms; gum sandarac and gum elemi, of each 2 ounces; dragon's-blood and seed-lac, of each 1 ounce.

The following precautions should be observed:

1. Be sure there is no oil or grease on the brass; do not touch the work with the fingers; hold it with spring tongs or a taper stick in some of the holes.
2. Always handle with a piece of clean cloth.
3. Heat the work so hot that the brush will smoke when applied, but avoid overheating, as it burns the lacquer.
4. It is well to fasten a small wire across the lacquer cup, from side to side, to scrape any superfluous lacquer. The brush should have the ends of the hairs all exactly even. If not so, trim the ends with sharp scissors.
5. Scrape the brush as dry as possible on the wire, making a flat smooth point at the same time.

6. Use the very tip of the brush to lacquer with, and carry a steady hand.

7. Put on at least two coats. It is well, to make a very durable coat, to blaze off after each coat with a spirit lamp or Bunsen burner, taking care not to overheat and burn the lacquer.

8. If the lacquer is too thick, it will look gummy on the work. If too thin, it will show prismatic colors. In the first case add a little alcohol; in the latter, set the cup on the stove and evaporate some.

9. Avoid handling lacquered work until cold.

Soluble Wash Bluing.

S. D. K.—The following is said to make one of the best wash bluing known, and when prepared in quantity is very cheap: Dissolve 217 parts of potassium ferrocyanide in 750 parts of distilled water, and to the solution add sufficient water to make in all 1000 parts. In another vessel dissolve 100 parts of ferric chloride in sufficient distilled water, and bring the solution up to 1000 parts as before. Make a cold saturated solution of sodium sulphate in distilled water, and of the solution add 2000 parts to each of the two iron solutions (making 3000 parts of each). Now add the chloride solution to the ferrocyanide little by little, under constant stirring. After the last of the ferric chloride is added continue the stirring for some time. Filter off the liquid and wash the residue on the filter with distilled water until the wash water comes off a deep blue color. After washing, spread the mass out to dry, either at ordinary temperature or by artificial heat. When dry, a lump of this substance, which is soluble Prussian blue, breaks with a fine, bronze-colored fracture. It is completely and easily soluble in water, hot or cold. With the addition of a little mucilage it makes, when dissolved in water, a beautiful blue ink, and may be also used for hand-stamp ink. As a laundry bluing it is said to leave nothing to be desired either in cost or quality.

Boards which Exchange Certificates.

H. H. T.—A full list of the secretaries of the different boards of pharmacy throughout the country was published in the BULLETIN OF PHARMACY for July, 1911, page 306. If you do not happen to have a copy of this particular issue, the publisher will doubtless be able to send you one at the customary price of ten cents. You ask also about the list of the States which interchange certificates with one another. It is very difficult to give this information for the reason that the boards are constantly changing their requirements. If you will write the secretary of the board of that particular State in which you desire to practice, he will give you all the information required.

Back in the BULLETIN OF PHARMACY for February, 1909, on page 84, we gave a list of pharmacy boards which at that time accepted the certificates of other boards, and another list of those which accepted college diplomas in lieu of examinations. The information printed on that occasion may be of some use to you, although, as we have already stated, it is not up to date, and the situation may now be somewhat different.

Stock Dip and Lice Killer.

W. D. Co. wants a formula for the preparation of a stock dip and lice killer.

The following formula for a sheep dip is recommended by the United States Department of Agriculture. It should be generally serviceable for stock:

Soap1 pound.
Crude carbolic acid.....1 pint.
Water50 gallons.

Dissolve the soap in a gallon or more of boiling water, add the acid, and stir thoroughly.

The following formulas have been approved by the British Board of Agriculture:

LIME AND SULPHUR DIP.

Mix 25 pounds of sulphur with 12½ pounds of good quicklime. Triturate the mixture with water to a smooth cream and transfer this to a boiler of 20 gallons capacity. Make up the volume with water to 20 gallons, boil and stir during half an hour, when the liquid should have a dark-red color. If yellowish, continue the boiling until the dark-red color is obtained, keeping the volume at 20 gallons. When the liquid is cooked decant off from any small quantity of insoluble residue and make up the volume to 100 gallons with water.

CARBOLIC ACID AND SOFT SOAP DIP.

Dissolve 5 pounds of good soft soap, with gentle warming, in 3 quarts of good crude carbolic acid. Mix the liquid with sufficient water to make 100 gallons.

Tartar Emetic; Oil of Wine.

J. S. submits two queries. He asks whether the pentoxide of antimony can be used instead of the trioxide in making tartar emetic. He also wants to know the difference, chemical and therapeutic, between light and heavy oils of wine.

The United States Dispensatory gives potassium bitartrate and antimony trioxide as the ingredients for the manufacture of tartar emetic. Without inquiring into the chemical possibility of using the pentoxide we say no to your query, for the reason that the resulting product is apt to be much more poisonous than if made in the usual way. We reason by analogy that since pentoxide of arsenic is far more toxic than trioxide, the same difference may hold true of antimony oxides. Better follow the official method for making tartar emetic and be safe.

The chemical differences between heavy and light oils of wine are described on page 827 of the last edition of the United States Dispensatory. On page 828 the medical properties of the heavy oil are given. We can add nothing to what is stated there.

Resilvering Mirrors.

J. R. M. wants a method for resilvering mirrors.

Clean the bare portion of the glass by rubbing it gently with fine cotton, taking care to remove any trace of dust and grease. If this cleaning be not done very carefully, defects will appear around the place repaired. With the point of a penknife cut upon the back of another looking-glass around a portion of the silvering of the required form, but a little larger.

Upon it place a small drop of mercury; a drop the size of a pin's head will be sufficient for a surface equal to the size of the nail. The mercury spreads, immediately, penetrates the amalgam to where it was cut off with the knife, and the required piece may be now lifted and removed to the place to be repaired. This is the most difficult part of the operation. Then press lightly the renewed portion with cotton; it hardens almost immediately, and the glass presents the same appearance.

Preventing Raised Checks.

B. & P. write us as follows: "Please tell us the best way to prevent our checks being raised. We do not care to spend \$30 for a protectograph. Is there a check or paper that is safe?"

A protectograph is, of course, the best safeguard against raised checks. Many banks, however, supply checks with a design lithographed on a smooth surface so that any erasure shows up plainly. The Calvert Lithographing Company of Detroit and other houses can doubtless furnish you with such blanks. Again, some firms have an understanding with the banks whereby the amount of the check is written in red ink through the signature. That insures a certain amount of protection. Of course, the trouble lies in writing checks for such sums as five dollars or eight dollars where the bearer can change the amount to fifty or eighty.

Waxed Paper for Envelopes.

J. B. R. writes: "Can you give us any information as to the process of rendering paper transparent, similar to that used by the manufacturers of envelopes designed to show the name and address through the paper?"

This is probably waxed or paraffin paper. We do not know the process of manufacture. Possibly tissue-paper is run over a roller which is wet with paraffin oil. Why not buy it ready made?

An Orange Drink.

W. D. Co.—We do not know the composition of the proprietary preparation which you mention. The "Spatula Soda Water Guide" gives the following formula for an orange drink:

Orange syrup1½ ounces.
Juice of one-half lemon.
Ice, two-thirds.
Soda, sufficient.

Ice-cream Powder.

A. R. H.—We do not know the composition of the proprietary compound which you mention, but the following formula for ice-cream powder is found in the literature:

Powdered starch.....1 ounce.
Powdered sugar.....1 ounce.
Essence of almonds.....10 minims.
Essence of vanilla.....10 minims.

Mix well and sift.

This quantity is sufficient for a pint of milk, with which it is to be mixed, then brought to the boil, and when cold put in the freezer.

Other coloring and flavoring agents may be used if desired, according to the kind of ice cream wanted.

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THE MONTH'S HISTORY

THE STATE ASSOCIATIONS.

The State pharmaceutical associations occupy the center of the stage at this season of the year. Two or three of them are now meeting every week, and we find that certain reforms are being agitated by many of them with a good deal of unanimity. There seems to be a general movement, for instance, to secure legislation which, if possible, will very largely restrict the sale of patent medicines to druggists.

Out at the Iowa meeting the other day we were informed that the Board of Pharmacy, fortified by an opinion from the Attorney-General, had brought suit against certain grocers for the sale of proprietary medicines containing drugs mentioned in the pharmacy act. The Proprietary Association of America was defending at least one of the suits, and the

association was therefore urging the advisability of adopting the new Freericks-N. A. R. D. measure, which would compel all patent medicines to bear on their labels a statement of the content of potent ingredients, and of alcohol beyond a certain percentage. Mr. Freericks' idea is that with such information on the label, the public need would be shown of having the sale of many patent medicines restricted to educated pharmacists, qualified to advise customers on professional matters of this character. The Iowa Association will endeavor to have a law of this kind enacted, and several other State bodies are considering legislation of much the same character.

Then, too, a number of the State associations have exhibited a good deal of impatience because physicians have not been brought under the scope of the food and drug laws. This point has been discussed at several meetings, and in two or three instances it has been voted to attempt legislation which would give the board of pharmacy or other enforcing authority the same supervision over drugs dispensed by physicians which it has over those dispensed in drug stores. Thus it will be seen that the druggists are endeavoring to restrict the competition of grocers on the one hand and physicians on the other.

* * *

FREE ANTITOXIN NUISANCE.

Another note which has been struck at a number of the State meetings is that of opposition to the action of some of the States in distributing free antidiphtheric serum. This is what Charles B. Sears, president of the New York State Pharmaceutical Association, had to say on the subject in his annual address:

There is a growing tendency among a certain class of medical practitioners to avail themselves of the use of State free antitoxin for their own pecuniary benefit. The object of free antitoxin, to give the needy the benefit of curative treatment which would be beyond their means, is commendable, but the abuse of this privilege is very reprehensible and a burden upon the State, an injustice to the balance of the medical pro-

fession, the drug trade, and to the laboratories which maintain expensive equipment and a corps of studious workers perfecting the various antitoxin serums and bacterial vaccines. It is recommended that this association take such action as to bring about a correction of this abuse, limiting the use of free treatment in those cases dependent upon charity to cases treated by physicians employed by the department of charity or health.

There is no doubt at all that this abuse has grown greatly within the last few years, not only among some of the State governments, but in many of the cities as well. Waiving cases of absolute poverty, there is no more reason for a State or a municipality to manufacture and give away serums than for it to manufacture and distribute shoes or automobiles. It is a distinct interference with private industry. President Jacob Schrod, of the Texas Pharmaceutical Association, deplored the establishment of an antitoxin factory in his State, and declared it a useless expense to taxpayers, an injustice to retail distributors of medicines, and an unwarranted interference with the rights of manufacturers.

* * *

PREREQUISITE DIFFERENCES.

Legislative matters, indeed, seem to have attracted the major share of attention at most of the State meetings this year, and in at least two or three States we find the druggists at loggerheads with one another. In New Jersey a year ago it was voted by a small majority to seek the enactment of a graduation prerequisite law. Subsequently, however, when the bill was introduced in the legislature, it was vigorously opposed by the minority faction in the State Association. The legislature, finding the druggists divided among themselves, therefore took the easiest course and let the bill die.

This situation formed the main theme of the report of George M. Beringer, chairman of the Legislative Committee of the Association, at the recent annual meeting. He charged, moreover, that some of those who had supported the bill in the discussion at the 1911 meeting, had stabbed it in the back afterwards. His report called forth a vigorous debate, and Mr. Beringer himself conceded that under the circumstances it would probably be necessary to carry on a campaign of education among the druggists of the State before attempting to introduce another prerequisite bill in the legislature.

Out in Minnesota, where the graduation prerequisite idea has been discussed for several years, we find that at the recent annual meeting of the State association a vote was taken, resulting in a small majority in favor of the measure. This majority was so slight, however, as to breed the suspicion that the history of the New Jersey bill may be repeated. The minority in opposition very strenuously presented its objections, and it is too much to expect that it will keep quiet when the bill is up for discussion in the legislature.

All of which constrains us to say, what we have said on many occasions before, that progressive legislation of this character can be secured only when it has a large body of sentiment behind it. The question has been fought over every year at the Illinois meetings for five or six years, perhaps longer, but only now has a sufficiently large number of druggists in the State come to look upon the step as necessary. We reported last month that a popular vote had been taken throughout the State and that at last the drug trade was found to be almost a unit in support of the proposition.

* * *

THE SCRAP IN PENNSYLVANIA.

And while speaking of the differences between druggists over legislative matters, we are reminded that another storm seems to be sweeping over the grand old Republican State of Pennsylvania. The drug trade there has been largely torn up for three or four years over an attempt to secure amendments to the State pharmacy and anti-narcotic laws. At the State meeting last year the retort courteous was bandied back and forth with a good deal of freedom, and it was finally decided to make another attempt to get together this year. New drafts of a pharmacy bill and an anti-narcotic measure were printed and distributed a month or two prior to the meeting, and at the meeting itself they were subsequently amended somewhat and approved by a small majority.

This majority was so slight, however, and the opposition was so determined, that mutterings of discontent have been heard ever since. The Philadelphia contingent, for instance, believe that nothing should be attempted in the way of anti-narcotic legislation until the Federal government has passed one of the bills now under consideration in Congress. The

country druggists, on the other hand, are very indignant over that feature of the pharmacy draft which provides that general stores over three miles from a pharmacy shall be licensed to sell certain drugs and medicines in original packages. Although beaten at the State meeting, these factions still insist that they will not lie down, and a typical expression was that of Walter Rothwell of Hatboro, who declared at a recent meeting of the P. A. R. D. that "We countrymen are opposed to both these laws, and we propose to get a steering committee to work on the various legislators of the State with a view to having the measures killed."

It would seem apparent that nothing can be done until the drug trade of Pennsylvania gets closer together on this proposition. That all legislation is the result of compromise has been pointed out over and over again, and the druggists of Pennsylvania must apparently minimize their differences before anything can be done in the way of securing adequate legislation.

* * *

FEATURES OF PENNSYLVANIA DRAFT.

Waiving the Pennsylvania anti-narcotic bill, the principal feature of which provides for a record of all sales, the pharmacy bill finally approved by a small majority of the State Association contains the following as its main provisions: It declares for the licensing of the drug stores of the State at an annual fee of one dollar; the licensing of registered pharmacists and qualified assistants; the permission of the licensed general store, over three miles from a pharmacy, to sell drugs for medicinal uses in original packages put up under the supervision of a registered pharmacist; the exchange of State board certificates with the boards of other States having equal requirements for registration; the elimination from the list of poisons, the sales of which have to be registered and the article labeled, of colors ground in oil, white lead, and lead products for technical purposes, and making a misdemeanor of the failure to recognize the request in writing by a physician that his prescription be not renewed. As prescriptions, according to the proposed law, must be kept on file by the pharmacist for at least five years, this law virtually settles in Pennsylvania the question of the ownership of the prescription.

N. A. R. D. LEGISLATIVE CONFERENCE.

In the foregoing paragraphs we have touched very lightly on some of the legislative questions now agitating the druggists of the country, as represented in their State pharmaceutical associations. On a number of these questions there are as yet great differences of opinion. Sentiment must be crystallized before successful and desirable legislation can be achieved.

Under the circumstances, therefore, we consider it very fortunate that the N. A. R. D. is making preparations to have another legislative conference at the forthcoming meeting of the organization in Milwaukee. A conference was called at Niagara Falls last year, but owing to the sudden illness of Judge Errant, just before the convention, very little could be done. In the meantime Mr. Freericks has been acting as the general attorney of the association, has been devoting himself to a careful study of legislative problems, and is well qualified to direct the discussion at Milwaukee.

Secretary Potts has sent out a general call on behalf of the proposed legislative conference, and it is earnestly to be hoped that this will become one of the most productive features of the Milwaukee gathering. The American Pharmaceutical Association, at the Boston convention last year, passed a resolution calling for a joint legislative conference to be attended by delegates from all of the national bodies—the A. Ph. A., the N. A. R. D., the N. W. D. A., and the like. It was unfortunate that nothing was apparently ever done to bring such a conference about. The idea died a-bornin'.

* * *

AS TO COMMERCIAL TRAINING.

Charles B. Sears, in his presidential address at the meeting this year of the New York State Pharmaceutical Association, had the following to say about the necessity of a greater degree of commercial education in pharmacy:

It is our duty to educate our young men in the profession of pharmacy, but we cannot but be mindful of the changing conditions affecting the calling. It is urged that there is a marked decrease in prescription writing. Be this as it may, we must recognize the conditions that tend to decrease the drug trade proper. Dispensing physicians, electrical treatments, osteopathy, serum and bacterin therapy and so-called Christian science all tend to

curtail the use of drugs. It has therefore been necessary for the drug trade to add side-lines. With the addition of these side-lines the profession of pharmacy is becoming more and more commercialized, and we note the lack of training in our employees in commercial lines, and from discussion in the drug journals this lack is not confined to the employees alone.

We must not lose sight of the ethical side of our business, but at the same time we should provide education for our young men that would prepare them to estimate profits, overhead expenses, etc., that they may be competent to meet the severe competition that the "chain store," department store, and mail-order house is bringing us. It is therefore recommended that this association request the pharmaceutical colleges of the State to provide a limited commercial course in connection with their regular instructions.

The committee to which President Sears' address was referred, acting upon the several recommendations contained in it, expressed its opinion that "no request should be made upon the colleges to give consideration to the commercial training of students as in the present courses adequate commercial instruction is provided." Now we disagree most decidedly with the committee, and we desire to put ourselves on record as being in sympathy with the position of Mr. Sears. We are saying nothing about the schools of pharmacy in New York State, and nothing individually about any other schools. But we have long cherished the conviction that pharmaceutical education as a whole in this country has not yet paid the attention which it ought to pay, and which in time it surely will pay, to the subject of commercial training. This is a commercial age; business to-day is conducted on a scientific basis; the retail drug trade is at least 50 if not 75 per cent commercial in character; and we are absolutely certain in our own minds that pharmaceutical education ought to be more or less revamped until a far larger share of attention is devoted to business training than the subject now receives. But this reform, like all other reforms, must be preceded by a period of agitation and enlightenment. Let the good work go on! * * *

THE LIQUOR QUESTION.

The liquor crisis in pharmacy is not anything like as acute as it was a few years ago, when the temperance wave began to sweep over the country. For one thing, the wave itself has somewhat receded. For another, local sentiment has in many sections caused the passage of laws restricting the sale of liquors in drug stores. For a third, the

druggists themselves have in some cases seen the light. Out in Iowa, for instance, where the crisis was acute two or three years ago, we found on a recent visit to the State that things were in very good condition. Many druggists have voluntarily thrown out liquors entirely from their stores, while in many counties the sale of liquor has been denied entirely in drug stores as in saloons.

In West Virginia, however, the question is apparently still an acute one, and we are informed that at the recent annual meeting of the State Pharmaceutical Association a resolution was unanimously adopted calling upon the next legislature to prohibit the sale of liquor in drug stores under any circumstances whatsoever. The members of the association have, it would seem, gotten to the point where they believe there is only one way to solve the liquor problem in pharmacy, and that is to drive it out root and branch.

* * *

A NEW DEAN.

A good deal of gratification has been expressed over the selection of Julius W. Sturmer to succeed I. V. S. Stanislaus as dean of the Medico-Chi College of Pharmacy in Philadelphia. It will be recalled that Dean Stanislaus recently resigned to take up some branch of private manufacturing. Professor Sturmer has for several years been a member of the faculty of the Department of Pharmacy of Purdue University in Indiana, from which school he was himself graduated in 1891. He is well known to the membership of the American Pharmaceutical Association, and during the last few years has read a number of papers before the Section of Education and Legislation of that body which have shown him to be possessed of a capacity for original thought and of definite and well-wrought ideas in the science of teaching. He is likewise the author of two or three books, the chief one being on the subject of pharmaceutical and chemical arithmetic.

* * *

ANOTHER EDUCATIONAL FUND.

We had something to say last month about the commendable effort of the Tennessee Pharmaceutical Association to establish an educational fund for the assistance of worthy young men who need financial help in getting a pharmaceutical training. We are

glad now to observe that similar action is being taken by the Alabama Association. What is known there as the Candidus memorial fund is being developed as a tribute to the life and services of Dr. Philip C. Candidus, who died two or three years ago. The association has appointed a committee of six to raise and handle the fund, and, as in Tennessee, the money will probably be loaned to students instead of given them. At the Alabama meeting this year two cash prizes of \$25.00 each were awarded to authors of the best papers read at the meeting, and it was quite gratifying that both men immediately turned the money into the Candidus memorial fund. With the Michigan Association in the lead as the originator several years ago of the Prescott memorial fund, we now have three State organizations carrying on admirable work of this character.

* * *

The Mellin's Food Co. of Boston has recently been unfortunate enough to suffer through death the loss of its president, Thomas Doliber, who was the founder of the company, and whose business career covered a remarkable period of nearly 60 years.

EDITORIAL

PREVENTION RATHER THAN CURE.

Nothing is doing more to minimize disease in this country than the spreading knowledge of prophylaxis. Prevention rather than cure is the key-note of modern medicine. And, strange to say, the movement to eliminate the various sources of infection is being fostered by no class more than by the doctors themselves. People may talk about the commercialization of the medical profession, but one fact that stands out boldly against the charge is the manifest desire on the part of physicians to prevent disease wherever they can.

To their credit it may be said that their efforts to spread a knowledge of prophylaxis among the masses have already accomplished a world of good. And it is a fine tribute to the charity of our medical men, that they give unstintedly of their time to purposes which mean the minimizing of their own practice and the diminution of their own incomes. Of

course, every man worth his salt has a certain amount of altruism in his make-up, and is willing to make personal sacrifices for the good of others. But in these days of more or less conflict between doctor and druggist, it is well to open our eyes wide to the virtues of our medical friends.

Imagine a lawyer doing anything to stop litigation! Any druggist who has ever had occasion to consult one would be incapable of such a supposition. Yet medical men are prominent in anti-tuberculosis campaigns. They are found lecturing to laymen on the serious consequences of venereal diseases. They give thought to our milk and water supplies, and otherwise look out for the sanitation and hygiene of society.

By way of further preventing diseases, physicians are perfecting a system of vaccination which bids fair to make a big hole in their annual incomes. Typhoid vaccine, for instance, which has already been mentioned at some length in these columns, promises to reduce the disease to a mere fraction of its former frequency. There have been a half million cases of typhoid fever annually, the mortality running from 12 to 15 per cent. Some 30,000 people, we have it on good authority, die every year from the disease. The army men in their summer maneuvers have been especially subject to infection from drinking contaminated water. Communities in the country districts as well as in the cities have contributed year by year their share of victims to typhoid.

But thanks to the efforts of the medical profession, a vaccine has been perfected which will reduce the frequency of this trying disease very materially. The prophylactic value of anti-typhoid vaccination has been demonstrated beyond doubt. In time it will be used in every community afflicted with typhoid, which will mean the elimination of much illness. Not only to cure sickness but to prevent it appears to be the aim of medical workers of the present day.

THE MISCONCEPTION ABOUT DRUG GUARANTIES.

Despite the amount of discussion and elucidation which has centered in and about the food and drugs act ever since its passage six years ago, there is still a good deal of misunderstanding about the question of guaranties.

The usual statement on packages, "guaranteed under the food and drugs act," etc., is ordinarily interpreted by the public to mean that the product has been guaranteed by the government and given the official stamp of approval.

Some druggists, moreover, are victims of this same fallacy. Others, while knowing that this is false, and that it is the manufacturer instead of the government who guarantees the goods, still believe that the manufacturer has not provided a guaranty unless a statement to this effect is printed upon the label. Still others insist that the guaranty statement *must* be printed, that the law demands it, and that products are illegal which do not bear it.

Now these are all misconceptions. The package need contain no statement to the effect that the product has been guaranteed by anybody. The law makes no such statement necessary. It is simply printed for the protection of the dealer himself, who might otherwise be prosecuted by the government, State or National, if the goods were found adulterated. The law generously declares that a retailer, selling a product made by another, will be absolved from prosecution if he can show a guaranty from the man from whom the goods were purchased. The government then shifts the blame from the retailer to the man who furnished him.

Now the manufacturer or the jobber may protect the retailer with a guaranty in one of two ways. He may attach it to every bill of goods, thus covering everything represented on that particular invoice. Or, for purposes of convenience, he may register a blank guaranty in Washington covering all of his output. In the latter event he is given a number by the government, and this number he may then print on his packages together with the customary statement that the products are "guaranteed by — under the food and drugs act."

But the latter method is merely an alternative. The manufacturer may, if he chooses, use the other form of guaranty, and say nothing at all about the matter on the goods themselves. Thus it does not follow that a retailer is unprotected in selling a given article merely because the label on that article says nothing about a guaranty.

Furthermore, every retailer should understand by this time that he can look for protection only to the house from which he pur-

chases the goods. If the goods go through three or four or a dozen hands before they reach him, no guaranty protects him except that of the man or the firm from whom he secures them. In other words, so far as most transactions are concerned, it is the jobber's and not the manufacturer's guaranty to which he must look in case of trouble.

ANOTHER MODERN INSTANCE.

We have no desire to become moral teachers to the community. There is one great weakness, however, which we have mentioned several times in the BULLETIN during the last two or three years, and which apparently needs mentioning again. We refer to what seems to us the foolish, utterly inexcusable, and almost criminal failure of so many druggists and other business men to protect themselves against fire losses by adequate insurance. Here, for instance, are portions of a personal letter which we have received during the last month from one of our subscribers:

I have always *tried* to live the life of a man, and I shall keep on trying, but it was an awful blow when I let about eighteen or twenty thousand dollars go up in smoke without one penny of insurance. Others before me and some since have done the same, and have done it as honestly as I did, but that consideration is of no avail now. I am left as one of the used to be's—a thing of the past. I have been accustomed to active merchandising all my life, and I always loved to mingle with people up to the closing of my store on the night of September 28 last, but it was an awful experience to get up as a lone wanderer the next morning with nothing left but my store key in my pocket. I have always said that whatever happened I would hold myself together and keep my mind collected and solid, but it has been mighty hard to keep that promise. It sometimes proves to be all I can do to keep from letting my mind take its flight.

This is pitiful, isn't it? A man evidently well along in years, with insufficient youth and energy to start in afresh, is practically left penniless at a time when he ought to begin taking things easy. But, unfortunate as this particular instance is, how foolish are business men generally who ignore warnings of this kind, and who fail to protect themselves at a relatively slight expense against losses which may come to them at any time! A druggist who fails to take out fire insurance is only one step removed from the man who refuses to get off the tracks when a railroad train is approaching.

THE HALL OF FAME

A BRILLIANT PRIZE WINNER.

A remarkable record seems to have been made by one of the seniors at the Philadelphia College of Pharmacy this last year. We refer to Elmer H. Hessler of Cape May, N. J. From the commencement programme it ap-



ELMER H. HESSLER.

pears that 17 prizes of various kinds were awarded to members of the graduating class. Of these 17, eight were won by Mr. Hessler, and in five other cases he received honorable mention. Thus he figured conspicuously in 13 out of 17 contests! Under the circumstances it was not at all surprising that he was accorded the rank of "Distinguished," conferred only upon two graduates a year.

The eight prizes bagged by Mr. Hessler were as follows: The Alumni gold medal; the Procter Prize—a gold medal for the highest general average with a meritorious thesis; the William B. Webb Memorial Prize—a gold medal and certificate for the highest general average in operative pharmacy and specimens; the Chemistry Prize of \$25.00; the Analytical Chemistry Prize of \$25.00; the Instructor's Prize of \$20.00 for the highest term average in pharmacy, chemistry, and materia medica; the Kappa Psi Fraternity Prize—a gold medal for the highest general average during the senior year; and the Public Lecture

Report Prize of \$10.00, for the best written report of a series of ten public lectures held under the auspices of the college.

This exhibits quite a range in scholarship, but we trust we may be pardoned if we remind the young gentleman that the world watches a brilliant prize-winner far more keenly than it does the average man, and expects much greater things of him. Mr. Hessler must make good with a vengeance—or his friends will be disappointed in him!

DR. J. D. HUMPHREY.

Dr. Humphrey is well known to those druggists who attend the annual meetings of the N. A. R. D. He is almost always a delegate from his home State of Alabama, and he has frequently served the organization in important official capacities. In Alabama he is of course one of the leading spirits, and the



DR. J. D. HUMPHREY.

State association would not be the same without him. A graduate in medicine also, he stands well among the physicians, and frequently talks before medical meetings in the interests of the druggists of the State.

DR. BEAL'S SON MARRIED.

Cards were sent out last month announcing the marriage of George Denton Beal to Miss Edith Downs of Scio, Ohio. Mr. Beal is the son of Dr. James H. Beal, general secretary of the A. Ph. A. and editor of its official

organ. The young man has a brilliant heritage to draw upon, and he will undoubtedly carve out a successful future. He is instructor in chemistry at the University of Illinois.

A NEW MEMBER OF THE WISCONSIN BOARD OF PHARMACY.

The recent death of H. B. Allen, of Richland Center, a well-known member of the Wisconsin Board of Pharmacy, left a vacancy to be filled. To this position the governor has appointed B. J. Kremer of Fond du Lac. The appointment has proved a popular one. On



B. J. KREMER.

several occasions the State association has indorsed Mr. Kremer for appointment, and the governor was evidently moved by the association's attitude. Mr. Kremer is an alumnus of the Northwestern School of Pharmacy in Chicago. He is the principal owner and the manager of the Kremer Drug Co. in Fond du Lac.

The Board of Pharmacy in Missouri, which has for some years been considering the advisability of establishing "practical" examinations, has now adopted them as a regular feature of its work. The board also requires one year of high-school work or its equivalent as a preliminary requirement from all candidates.

PROFITS AND EARNINGS

THIS STORE RUNNING BEHIND.

Here is the statement of a druggist who apparently is in hard straits. He writes:

"This business is somewhat out of the ordinary. On February 1, 1911, I was hired to take charge of a store in this small town. It was in awful shape. The stock was run down and everything frightfully dirty. I found some 'dead stock' in the shape of a couple of kittens under one counter. The party who bought the store realized what we were up against, and said if we broke even on the first year's business we would be lucky.

"There was no cash to start with, and I used my own funds to make change the first day. Our new soda fountain wasn't installed until June. Meanwhile we missed a lot of trade. Then the landlord built on to the store room for us, and his taking out the rear end of the store, which was brick, made a very dirty mess for a time. This shows some of the difficulties I have worked under.

"The stock and fixtures—everything, in fact—invoiced on February 11, 1911, \$2490.03. On February 18 the owner bought a stock from a dispensing physician amounting to \$155.35, June 1 a new soda fountain for \$495, and November 1 a new furnace costing \$98, making a total of \$3238.38 put into the business."

Discounts	\$ 28 51
Expenses (including \$900 salary).....	1254 83
Cash receipts	5063 00
Disbursements	4983 39
Balance on hand.....	79 91
Merchandise (including all purchases and original invoice)	7836 85
Profit and loss (worthless accounts).....	15 65
Book accounts	289 13
Amount due the jobbers.....	539 55

Invoice at end of first year:

Fixtures	\$ 514 00
Soda fountain and supplies.....	584 56
Merchandise	1968 36
	\$3066 92

Apparently the owner is in business for his health. The manager draws \$900 a year at a loss of \$341.97 to the proprietor. Where does the proprietor get any returns on his investment? He better sell out, unless there is a promise of improvement in the business. Even

then he probably would have to take a loss. It is a question whether the store would bring him over 60 per cent of what it cost, should he care to sell it.

Let us see where he stands. He admits that \$3238.38 was invested in the business. His assets are:

Cash	\$ 79 91
Accounts receivable	289 13
Merchandise inventory	1968 36
Fixtures	514 00
Soda fountain	584 56
Total.....	\$3435 96

Subtracting accounts payable, \$539.55, from the assets of \$3435.96, we find he is worth \$2896.41. This is a pretty sad showing, for the original investment, as we have already pointed out, was \$3238.38. Admitting the difficulties that beset our correspondent, the fact remains that his business is running behind. He ended the first year with a loss.

Let us make an analysis of his profit and loss from February 1, 1911, to February 1, 1912. He began with an inventory of \$3238.38 and ended with an inventory of \$3066.92, a shrinkage of \$171.46. He bought \$4598.47 worth of goods which, less the cash discount \$28.51, cost him \$4569.96. Adding to this the shrinkage of \$171.46 in the inventory we find the goods cost the owner \$4569.96 plus \$171.46, or \$4741.42. To this add expenses of \$1254.83 and bad debts of \$15.65, and you have the total cost of the merchandise, \$6001.90. The sales were \$5669.93. The difference between the sales and cost of the merchandise shows a loss of \$341.97.

A statement of his assets and liabilities shows the same net loss:

Cash	\$ 79 91
Fixtures	514 00
Accounts receivable	289 13
Soda fountain	584 56
Merchandise inventory	1968 36
	—————\$3435 96
Accounts payable	539 55

Net worth\$2896 41

Commenced business February 1, 1911, with:

Stock and fixtures.....	\$2490 03
Bought physician's stock.....	155 35
Bought soda fountain.....	495 00
Bought furnace	98 00 3238 38

Net loss.....\$ 341 97

HIS EARNINGS GO INTO STOCK.

Here is a statement for analysis. The store is about three years old. The proprietor has been in business for himself just one year. He has the only drug store in a mining town of 1500 people.

Stock and fixtures, 1911.....	\$1515 00
Stock and fixtures, 1912.....	2947 79
Sales	6232 50
Purchases	4803 36
Amount paid on note.....	541 67

Expenses:

Freight and drayage.....	\$ 100 00
Clerk	250 00
Proprietor's salary	1000 00
Rent	300 00
Light	40 00
Fuel	30 00
Taxes and insurance.....	50 00

Total\$1770 00

This store must be expanding. The stock and fixtures almost doubled in the year 1911. They increased according to the statement from \$1515.00 to \$2947.79. All the profit apparently went into new stock. Our friend is evidently putting all his gains right back into business, which is the natural thing to do the first year.

Let us see where the money is going. Purchases for the year were \$4803.36. We find from the increase in the inventory, however, that goods to the amount of \$1432.79 went into the permanent stock, so that the net cost of the goods actually sold during the year was \$3370.57. Subtracting this figure from the sales of \$6232.50, we find gross profits of \$2861.93. Dividing the gross profits of \$2861.93 by the sales of \$6232.50, the percentage of gross profit is found to be 45.91, which is considerably higher than the average—so high, in fact, as to lead us to believe that we have possibly been led astray by the statement of our correspondent.

By subtracting the expenses \$1770.00 from the gross profit \$2861.93, we obtain the net profit, \$1091.93. Dividing \$1091.93 by the sales, \$6232.50, the percentage of net profit is found to be 17.5. This is high. The proprietor should enjoy a nice income from the business in the future when it will not be necessary to put so much of the earnings into stock.

The expenses are about the average for a small business. Dividing \$1770.00 by the sales of \$6232.50, the expense is found to be 28.39 per cent.



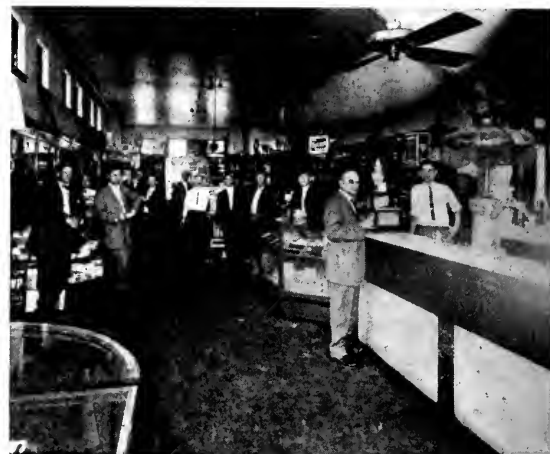
J. H. Carmichael of Ashton, Iowa, in addition to having the large salesroom shown in this picture, has another room 15 by 66 feet in dimensions which is devoted to paint and wall paper.



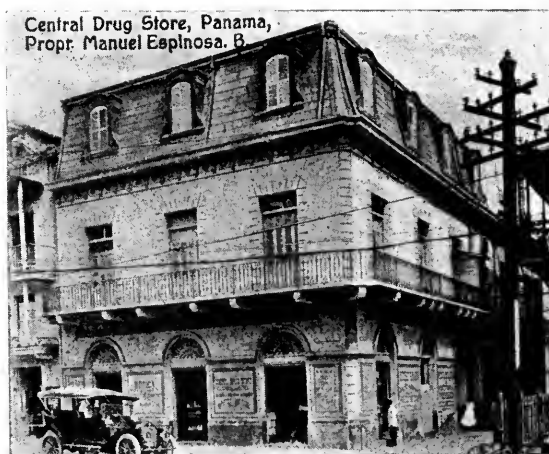
Dr. H. C. Hawley, proprietor of the Hawley Drug Co., Clarinda, Iowa, has one of the neatest and best equipped stores in the State. Everything is right up to the minute.



J. W. Jones, proprietor of the Chatham Pharmacy, Chatham, Va., is the gentleman standing with hat off in front of the cigar case. The soda fountain is a popular feature of Mr. Jones's store.



This picture illustrates the pharmacy of the Simmons-Horn Drug Co., Demopolis, Ala. Judging from the number of customers and clerks in evidence, these people do a gratifying volume of business.



Here we have an outside view of a pharmacy in Panama. It is known as the Central Drug Store, and the proprietor is Manuel Espinosa.



Perrone & Glando comprise a new retail drug firm in Oakland, California. Mr. Glando was formerly one of the department managers for the Owl Drug Co.

Drug Stores Here and There.



J. P. Lipp, Blissfield, Mich., is an energetic druggist who handles a large stock of everything in the drug and allied lines. "Get it at Lipp's!" is a slogan that he has made familiar.



This is a view of Mr. Lipp's prescription counter with the proprietor himself standing in the background. Mr. Lipp is one of the vice-presidents of the Michigan State Pharmaceutical Association.



The Mebs Drug Co., Columbus, Ohio, have one of the handsomest drug stores in the State. It is thoroughly departmentized and even has a rest room for ladies as well as a manicuring parlor.



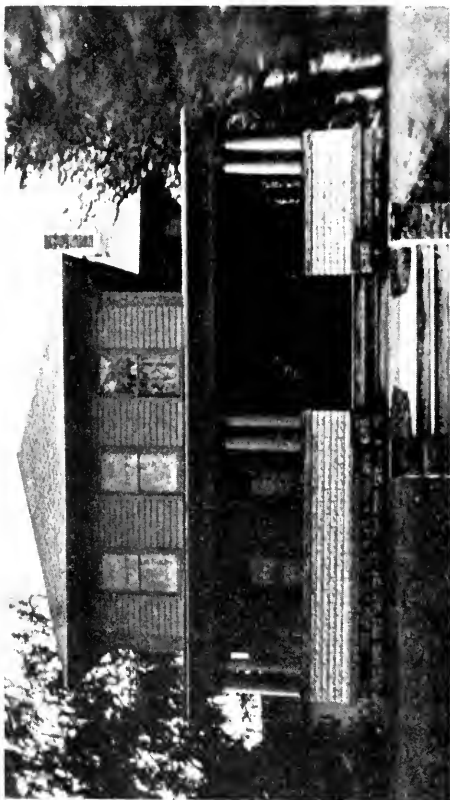
This shows the soda grill room in the Mebs store, where among other things a noonday lunch is served. The handsome fountain was installed by the Walrus Manufacturing Co. of Decatur, Ill.



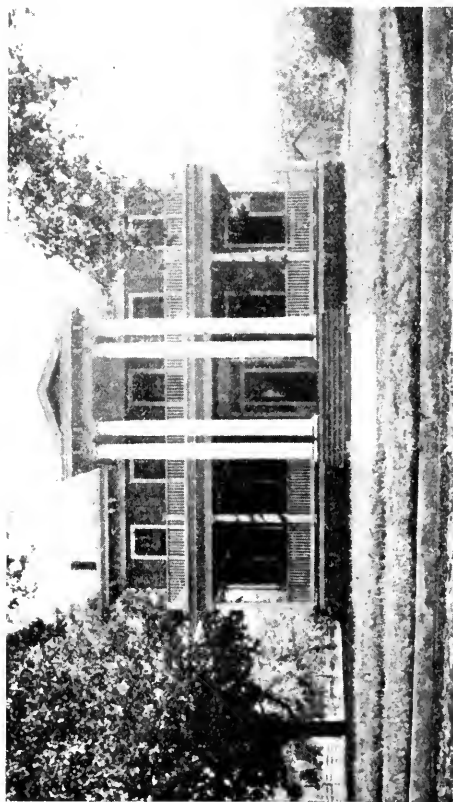
The Newman Drug Co., Louisville, Ky., of which Addison Dimmitt is the president, has a store the beauty of which is scarcely suggested in this engraving.



This shows the prescription department of the Newman Drug Co. It is finished in white enamel and the slabs and shelves are of white opal glass.



This is the residence of Azor Thurston, Grand Rapids, Ohio, who is president this year of the Ohio State Pharmaceutical Association.



Here we have the home of F. F. Vedder of LaHarpe, Ill. Mr. and Mrs. Vedder evidently believe in plenty of porch room, both upstairs and down!



Edward Williams, of Madison, Wisconsin, the well-known N. A. R. D. and board-of-pharmacy man, has a home on Lake Monona—a lake 13 miles long and three miles wide.



This shows a view of the lake from Mr. Williams's lawn. Imagine living under conditions like these the whole year around! And yet they say druggists do not enjoy themselves!

How Druggists Live at Home.

CONVICTS I HAVE KNOWN.

By HARRY B. MASON.

When quite young I was for nearly three years an inmate of a large and well-known prison in the East. I trust this frank and simple confession will not cause my readers to turn pale and glance behind them. I was not a prisoner, but if I had been—well, prisoners are neither such unusual nor such terrible creatures as the popular fancy paints them. It is quite as easy to find knaves and dangerous folk out of prison as in it. A sarcastic cynic once said that if everybody were landed behind the bars who deserved it there wouldn't be people enough left to serve as officers in the Salvation Army.

But I desire neither to accept nor to preach the gospel of universal evil-doing. What I really started out to say was this, that convicts are not such an unusual lot as they are popularly supposed to be, and that indeed they are surprisingly like the rest of us. Many of them are of course incorrigible criminals, but even these are shrewd enough to behave themselves in prison and to measure up to satisfactory standards of good prison citizenship. Many others are accidental criminals—a drunken frenzy, bad associations, sudden temptations, or hard luck has caused them to step aside but once from the straight and narrow path before realizing it, and then be thrust behind prison bars to eat out their hearts in despair and chagrin. Still others have committed the genteel crimes which thousands of men are committing every day—only they have been caught at it. On the whole the average of intelligence and of behavior is not so far below that to which we are accustomed outside the walls; and indeed one meets many convicts whose personalities are intensely interesting.

THE LUXURY OF PRISON LIFE.

My experience in the prison immediately followed my graduation from a school of pharmacy. I was the pharmacist of the institution, and besides attending to the duties of this position I did certain chemical and bacteriological work, and on occasion acted also as physician in the treatment of minor ills. Dur-

ing my entire incumbency I had quarters inside the walls, in the hospital building, and lived and ate and slept surrounded by convicts, whom, indeed, I regarded as I would the employees and patients of any private hospital were I to-day to be situated in such an institution. Convicts tended my person and my apartments. Convicts cooked my meals and served them. A convict assistant helped me in my pharmaceutical work and had the free run of the dispensary.

Indeed, I would not barter my three years



At the "morning call" the physician stood outside the dispensary window, examined the patients, and gave verbal prescriptions, while the pharmacist and his convict assistant ("Henry") did the dispensing inside and handed the bottles out of the window to the waiting victims.

or less of prison experience for any consideration. For one thing, it gave me a sense of luxury and autocracy which I never dare hope to feel again. I was absolute lord of my own little corner of the world. I had but to press a button in order to secure an attention and an assistance which only a ruler can command. There was one man to polish my shoes and brush my clothes, another to take my garments down to the tailor shop and press them, still another to receive my dictation and write my letters out on the typewriter, and yet others to save me the slightest exertion. It is a standing mystery to me how I ever had the courage to resign my position and again become a plain man acting as my own servant. I know how a millionaire feels when he loses his

wealth. Sometimes now, when of a Sunday morning I get warm and angry in polishing my troublesome shoes, I sigh for luxury and power that have gone forever, and I realize that even a prison has its attractions.

HENRY OF THE LIGHT FINGERS.

And then the people you meet in prison are so interesting! There was one man about my quarters who had an unquestioned right to be classed as an "incurable criminal." He was serving his third or fourth term for burglary, and yet he was as mild-mannered and gentle-eyed as a deer. His face would have gotten him a job as a church janitor or night-watchman almost anywhere. Perfectly devoted to me, and loyal in a degree which I have rarely



A corner of the pharmacist's office at the prison, adjoining the dispensary.

seen exhibited in private life, he was always looking for some opportunity to be of service and was genuinely pleased over anything which brought me good luck or satisfaction. I can see his smiling face now as he listens to some bit of personal news I am telling him, and I can follow him as he goes about fixing my room up and as he serves my luncheon and hands over some delicacy he has managed to secure by means of those prison politics in which he was an adept.

But there is no denying that Henry was light-fingered outside the walls. I do not think he would have done bodily injury even under danger to himself, or that he would have shot a revolver though likely to be captured. But he *did* like to burglarize a house and secure a big haul! The stories he used to tell me about his exploits would have put to

shame the ingenious imaginings of the artists who turn out our dime novels. He would give all the details of conception and execution in the most matter-of-fact way, and grin mildly as though he were relating how he had played a school-boy's trick on a chum back in his younger days. There was no boasting, no criminal fierceness, no social theory that the world owed him a living—only an apparent incapacity to realize the sin of taking things which didn't belong to him. It was all a kind of joke with him. Certainly he was a strange study.

Mrs. Ballington Booth has a marvelous influence over her "boys" in prison, and she has reformed hundreds of criminals and made respectable citizens of them, completing her work by educating society to give the convict a chance and not drive him back into criminality by branding him with infamy and refusing him work and an opportunity to redeem himself. Henry became one of Mrs. Booth's boys, and I have no doubt that he was perfectly sincere in his adoption of religion and in his resolve to earn an honest living by his trade as a cabinetmaker. But I must confess that Henry never found it convenient to return ten dollars which I loaned him as he was leaving prison. I got two or three letters from him during the first few weeks of his freedom, and he always mentioned the loan with gratitude and spoke appreciatively of the suit of clothes and other things which I had given him.

Whether he reasoned after a time that he had earned the money in my service and really deserved it; whether he failed to get steady work and could not easily repay the loan; or whether he simply could not recover from his fundamental incapacity to discriminate between honestly and dishonestly obtained things, I do not know. I have often wondered what became of Henry, and I have hoped I would some time run across him unexpectedly in my travels. Perhaps I shall yet.

A PRISONER TURNED GENTLEMAN.

This hope suggests another interesting experience. There was one man in the prison who was a very clever cabinetmaker, and who made me a desk after my own idea which was a source of great satisfaction to me—a desk, by the way, which I still have. Some

years later, when I had moved to another city and State, and was temporarily living in a boarding-house, a well-dressed man called one evening and sent up his card. The name was an unfamiliar one to me, and the man's business was that of traveling agent for a well-known firm of furniture manufacturers. I needed no furniture at that time, and I was at a loss to know what the fellow could want of me. As I went into the reception room a man of prosperous appearance and considerable dignity arose to greet me, and he had to explain who he was before I was able to recognize him. It was my old friend Stimson, the cabinetmaker. The difference between stripes and well-cut business clothes, and the contrast between the inevitable submissive attitude of prison and the independent air of liberty, were so marked that I could scarcely credit my eyes. Stimson had been with the furniture house for some time and was succeeding to the entire satisfaction of himself and his employers.

Some days after he called on me, when I thought there was no chance of any one meeting him in the city who had happened to see him in the house, I keenly enjoyed telling the table of boarders at dinner one evening where I had known Stimson before, and it was amusing to see how horrified some of the softer sex were! For a considerable time afterwards they locked their windows every night with great care, glanced under the bed with more than the usual degree of shivering apprehension, bolted their doors in the most secure manner, and for all I know pulled their beds against the door and sat up in bed all night, trembling at every sound.

Stimson is the only one of my convict acquaintances whom I have ever met in polite society, but this is because I am now somewhat distant from the prison. I have friends who repeatedly see ex-convicts in private life and who are on more or less intimate terms with them.

BUFFALO BILL'S SOCIAL MENTOR.

There was one man in the hospital in whom I was very much interested. He had enjoyed a most fascinating career and was a man of unusual education and culture. Let me call him Pattison—chiefly because this was not his name. Pattison was by profession an archi-

tect, but he was also a clever amateur painter, as I can attest by a couple of beautiful water-colors which I have in my library to-day. He was a linguist, knew stenography and type-writing, and it was because of these qualifications that the prison physician made him his secretary. The doctor was a man of reputation in his profession, wrote frequent papers for society meetings and journals, and Pattison became invaluable to him.

Pattison was then perhaps 45 years old. He had experienced a successful career in his profession, and for a number of years had enjoyed the unique experience of traveling about the world with Buffalo Bill and acting in the triple capacity of architect, secretary, and friend at a salary of \$6000 a year and expenses. He had drawn the plans, I believe, for the building which Buffalo Bill erected for his Wild West show in Chicago during the World's Fair, and he had also designed the buildings put up in several European capitals during Mr. Cody's trips abroad. He had acted meanwhile as Mr. Cody's secretary and had "coached" him for the difficult social duties which he was often called upon to discharge. When Mr. Cody was dined by the European monarchs, Pattison would sit at his elbow when circumstances permitted and make the whispered suggestions which a man of the plains, with little opportunities for culture, and at that time with little worldly experience, would naturally need in order to acquit himself creditably.

After leaving Buffalo Bill, Pattison had blossomed out into a promoter. I have forgotten what hopeful scheme he was elaborating, but I am quite sure it was as honest as are the plans of the average promoter. He was arrested and imprisoned on a technicality. My memory of the occurrence is somewhat hazy, but my impression is that he collected and used some watchful and anxious widow's money before his plan had proceeded far enough to give him the legal right to do so. She was afraid her money would disappear beyond recall, and she at once brought suit for its recovery and incidentally for Pattison's punishment. For some reason the judge or the jury, as the case may have been, didn't like the look of things, and Pattison was "sent up" for six years. He always declared his innocence, and I was once told by a man

outside, who knew the circumstances, that he thought Pattison had meant to "play square" in the deal.

Certainly he was a most exemplary man in prison, and he never lost his native dignity, his social polish, his attitude of a gentleman. I have rarely listened to a more fascinating raconteur than Pattison. He had traveled extensively, observed keenly, and read widely.



A partial view of the prison itself, showing the outside wall surrounding it.

He had mixed in the best of "society." His voice was low and melodious, and his manner the fruit of the best breeding. He had married the niece of the governor of a southern State, and much of his charm was doubtless due to his experience in southern social circles.

In speaking of his marriage I am reminded of an incident which gave me much secret



Another view of the wall, and some convicts filing through the prison gate after having been outside doing road-construction work.

amusement at the time. Pattison came rushing into my office one day in great indignation, his proud head thrown back farther than usual, and thrust before me a copy of *Munsey's Magazine* containing the picture of a handsome woman who, it was stated underneath the en-

graving, had become an actress. It was Mrs. Pattison. "Think of it!" declared Pattison with heat. "Think of it!—my wife disgracing herself and her family by going on the stage!" And the scorn and contempt in his voice and manner I can feel to-day as I think of the circumstance.

Well, Pattison left the prison shortly after I did, and I have heard often of him since. He has had the honorable and successful career which he deserved. He is a contractor in one of the large cities, and his income is one which I should not refuse if it were offered me. Recently he has married again.

A MELANCHOLY DANE.

Then there was Bergen, a slight young Dane with all the melancholy and all the interest of a Hamlet. Bergen always declared to the few who had his confidence, and with whom he



The prison band giving its daily concert on the lawn in front of the warden's office inside the enclosure.

deigned to chat on free and easy terms, that he was a member of one of the Danish noble families, and certainly his accomplishments and his bearing indicated it. He had come over to the World's Fair in Chicago as a representative of his government, and was at the Fair Grounds all summer. By the time the fair was over with he had become so enamored of conditions in America that he resolved to stay here. He was an ambitious fellow, was always an eager searcher after knowledge and experience of diverse kinds, and so he had attached himself to some prominent engineering firm. But he had meanwhile fallen in with a fast young club set and was spending money more rapidly than his government or his family, or afterwards his employers, could supply it to him, and before long he had

forged the firm's check for \$100 to tide him over an ugly difficulty which demanded immediate settlement. He had expected to secure the money the next day and take up the check before it should be presented at the bank, but there was a slip somewhere and the cup never reached his lips. He was arrested, convicted, and sent to prison for eight years.

For the first year or two Bergen felt his disgrace keenly. He kept to himself as much as possible. He refused to talk with either convicts or officers. He grew to be the picture of solitary and brooding melancholy. His face never lost its mournful expression during his whole term in prison, but in time he became more resigned to his lot and took advantage of the many opportunities to make himself useful which a prison offers to a man of cleverness and parts—opportunities not only to become useful, but in doing so to forget oneself also and to have that active interest in life which is, both in prison and out of it, the surest remedy for despair and the best guaranty of contentment.

Bergen was a clever musician, and before long he became the leader of the prison orchestra. He was admirably adapted for the task, and he soon had his convict musicians playing selections from the classic operas with a finish and a unity which were marked. To see his lithe figure and melancholy face as he waved the baton was to see a man who was throwing his soul into the effort, and who for the moment was living among spiritual and eternal harmonies far removed from dull earth.

Bergen's orchestra was a source of surprised delight to the many visitors who passed through the prison, but it never played so well as when Mrs. Booth came to the institution on periodical visits among her "boys." Then it was that the prison walls echoed and reechoed with the beauties of Tannhauser and Il Trovatore and Martha. The orchestra would station itself in the great rotunda or central court of the prison; on the first gallery above would sit the warden, his distinguished visitor, who was sometimes accompanied by General Booth and always by her secretary, and a few invited guests from the town outside; on the third gallery would stand some of the officers and such of the convicts as were free from the nature of their duties to indulge themselves in this privilege. Mrs. Booth was the idol of

every musician's heart, and those fellows played as though inspired when she sat above them and smiled her delight over the reception, and her deep interest in the men themselves.

Bergen was a fine linguist also. He spoke English perfectly, with scarcely a trace of accent; he knew French and German equally well, and he had a good workable conception of Latin and Greek. He was my teacher in French for a year, and incidentally this statement illustrates another advantage of prison life. To have men at ready call who could instruct me in almost any branch of human knowledge was a great treat, and it was a further convenience that they came to my study instead of my going to theirs. Nor do I need to point out the pleasure of having private tutors in your own chambers without the necessity of paying more or less handsomely for the service. The arrangement with Bergen, however, was mutually agreeable. It was a pleasure for him to leave his cramped cell and spend an evening in an atmosphere which was at least comparatively comfortable, intellectual, and independent.

But Bergen was not only a musician and a linguist. He was a clever draughtsman also, and he drew many plans for the rearrangement of the prison buildings. In divers other ways he showed his versatility and skill, and he was a most useful man about the prison. I must not neglect to say, in connection with his musical work, that he composed two or three orchestral selections while he was there and spent hours in transcribing the music for the different instruments and players. One of these compositions I well remember, and it had a mournful, solitary, despairing beauty which stamped it as the expression of Bergen's sad personality.

Bergen certainly had the artist's soul and temperament, and history and biography teach us that such temperaments are unstable, passionate, and often immoral. With all his fineness of spirit, his high breeding, and his pride of self, Bergen at bottom was not moored fast to any solid moral convictions. After he left prison I am told that for a few years he had a remarkable success, but he seems later to have cut loose from it all and to have reached the second sad stage in his career. His engineering and architectural skill and experi-

ence gained him (with Mrs. Booth's assistance, I believe) a good position in some industrial enterprise, and within a year he supervised the building of a large plant and afterwards became manager of it at an annual salary of five thousand dollars. This experience was repeated with another plant a couple of years later, and Bergen's friends were delighted at the noble and successful manner in which he was acquitting himself and wiping out the disgrace of one false step.

But, alas! he suddenly threw it all overboard and disappeared from view. Shortly after leaving prison he had married a relative of one of the officers, a girl whom he had seen occasionally in the prison where women are rarely in evidence, and where one's susceptibilities are keyed up by loneliness and by the absence of feminine companionship. It is always a dangerous experiment for the artist temperament to marry, for the conditions of success are so exacting that they are rarely met; and in Bergen's case the experiment was apparently a ghastly failure. Not long afterwards he deserted his wife, went no man knew exactly where, burned his bridges all behind him, and is now either suffering despair for the second time in his career or is breathing the air of spiritual liberty and independence again. I am told that he has committed crime once more, but my informants, when pinned down, are not able to give any of the details or to confirm the rumor.

THE STORY OF A YOUNG GERMAN.

And finally let me tell more briefly of young Brunig—another foreigner, but this time a German. Brunig was of an entirely different type. While well educated, well bred and capable, he lacked the versatile ability of Bergen, and he had his feet planted firmly upon the earth of materialism and practicality. Brunig had come of a good family in Germany. His father was a banker. The boy had gone through the schools of his country and had graduated from the "gymnasium." It had then become his duty, as it is the duty of every German youth, to spend at least a year in the German army. At this fate he demurred and to escape it he came to the United States, and, with his father's influence, secured a position in a large banking house. The old gen-

tleman thought it would be wise for the boy to learn the English language thoroughly and to become familiar with American methods and conditions—a training which would later on serve him in good stead in taking up his father's business in Germany.

For a year or two all went well. But, like Bergen, the young chap fell in with a fast set and they unintentionally accomplished his ruin. The pace was faster than he could travel. He got fearfully into debt, and a gambling experience one night, where he lost a hundred dollars, egged him on to a desperate act the next morning. He forged his firm's signature to a letter of credit for \$1500, changed his name, took the train for another city, secured there by good luck or by sublime "nerve" \$800 on the letter, and then, throwing discretion to the winds, began traveling through the country like a lord. He succeeded in tapping the letter of credit again for \$200, but this proved his ruin. In the midst of luxury and riotous living he was in danger, and before he knew it blue-coated officers of the law swooped down upon him and he wound up in a prison cell.

Brunig was a good bookkeeper and accountant, and we gave him a position in the hospital with charge over certain dispensary and medical records, and he worked faithfully and well. His desk was connected by a bell with my office, and I had only to push the button to secure his presence and enlist his eager desire to be of any service. He was a clean-cut young German of pleasant manner. Removed from all temptation, not thrust among others with more money than he; exempt from undesirable associations, he would never have gone wrong. The crucial moment came and he was not strong enough to stand the test. Judge Ben. Lindsay, of the Juvenile Court of Denver, who has had such remarkable success in reforming the boys of his city, has largely proceeded on the assumption that in nine cases out of ten a boy who commits a theft does so, not because of a criminal nature, but because of the double force of temptation and association, and that nearly every boy would do likewise when placed under the same circumstances. He has accordingly endeavored to remove the causes of juvenile crime so far as possible. I believe, too, that it was Poor

Richard who declared that it was much easier to be honest when your pocketbook was full.

But Brunig had learned his lesson. He had profited by his experience, and he determined like a sensible man not to waste time in vain regrets but to go out from prison and redeem himself. He has since done so with entire success.

SOCIAL CLEAVAGES IN PRISON.

It is perhaps needless to say that the prison was not populated altogether with such men as I have described. They were of course the exceptions, as most of them, indeed, would be in the world outside. It may perhaps be well to explain that a prison is not and cannot in practice be an absolute socialistic democracy, however feasible and necessary this may seem in theory. There are a great many special positions around a prison which convicts can fill successfully—more successfully, indeed, than the average guard or keeper; and it is the part of economy and wisdom to accept this fact and make the best of it. Between such men and the mass of convicts there is at

once the same division which manifests itself in society—and a prison is in a sense a section of society on a miniature scale. The men who have the brains, the experience, and the breeding secure the fruits of them here as elsewhere. They get the prize positions, and with them they likewise get certain privileges and exemptions.

The men I have been talking about belonged to this class entirely. They were not marched in lock-step to work in the shops at hard manual labor all day long, and then marched back in the late afternoon and locked in their cells for the night. Within certain limits they had the freedom of the prison, and they enjoyed the association of the officers. They were not locked in their cells until comparatively late in the evening. If it be held that such men should have been punished as the others were, I answer that they *were* punished every bit as cruelly. A sensitive man feels the mere fact of imprisonment far more than a hardened criminal feels severe discipline, arduous work, and the absence of all liberties.

“MY BEST PAYING SIDE-LINE.”

The Sixth of a Series of Important Articles—Phonographs and Records are Made to Pay Handsomely—An Experienced Dealer Tells How He Handles the Goods.

**By ELMER BACKER,
New Ulm, Minn.**

The best paying side-line on the market to-day is the Edison phonograph. We had to take three different types of Edison machines and one hundred records to get the agency in this city. I started in by doing some good advertising. I inserted a strong ad. in our local paper and kept it up every week, never using the same cut twice. I also had some circulars printed as shown in the illustration. These are sent to every farmer in this county and this city every month in winter and one or two in the summer. They serve to keep the phonograph uppermost in the minds of our patrons. More than one farmer has said to us: “If you don’t stop sending me this circular, I shall have to buy a phonograph. My wife and children are always begging me to get one.” Phonographs certainly make the

long winter nights shorter and are fine for entertaining visitors.

GERMAN RECORDS.

This being a German settlement, we have many calls for German records and keep a bigger stock of them than we do of English. When a customer has picked out about half a dozen and, thinking he has enough, tells us to get them ready, we promptly put on a good number while his own selections are being wrapped up. Nine times out of ten he takes that one also. In this way we sell three or four more records than the buyer would otherwise order.

Our latest advertising scheme was to invite the three popular dance music players in the city to our store and make some records. The

next day we announced in the local paper that we had these numbers which the music lovers of the town might hear. The instruments were the violin, cornet, concertina. Well, we sold over fifty blank records inside of a week. These home-made records are put on the machine in the same way as the ordinary kind. A reproducer is set in place of the pin and the record is attached very easily. The only trouble arises when the players are not near enough to the phonograph.

THREE DIFFERENT MACHINES IN STOCK.

When a prospective phonograph buyer comes in, we have three different types of machines to offer: the Gem, for \$15.00; the Fireside, for \$27.00; and the Home, with a

easy payment plan must sign a contract that this payment will be made every week or month. Any time we feel that we will not get the money, we can take the phonograph back without their consent. All records must be paid for as they are bought. We grant no credit in their sale.

COMPETING WITH MAIL-ORDER HOUSES.

One of our competitors is the Babson mail-order house in Chicago. The people in the vicinity think if they send away for a phonograph, they will get it more cheaply. Instead, they pay express and one dollar and forty cents for rubbish which we give free. I sent for one of his phonograph catalogues so that I could show the people that they pay more by having a machine sent to them than they pay us. In his catalogue twelve records are offered with the machines. These records are fifty cents apiece, which is all included in the price of the machine. But when a farmer comes in and asks how many records he gets, we tell him he can have as many as he wants. He doesn't have to take just twelve. He can take two if he wishes.

The Edison Company puts out four machines under the price of fifty-five dollars. We only keep three of these, as one, the Standard, has the same spring as the Fireside. The Standard only plays four-minute records, while the Fireside plays both the two-minute and the four-minute. The smallest machine, the Gem, costs fifteen dollars, but has no double spring. It has to be wound up before one starts playing. It also has a very small horn. The Fireside is our best seller. The price is twenty-seven dollars. It has an upright horn and double spring. With this machine we also sell the oak horn, which costs ten dollars more than the tin horn. It takes the metallic sound out of the music; the tin does not. The largest machine we have is the Home, which the oak horn always goes along with, the price being fifty-five dollars. The machine also has a better recorder than the Fireside machine. Furthermore, the double spring is bigger than other small machines.

WINDOW DISPLAYS.

The Edison Incorporated has issued window displays since December, 1911. The dealer pays three dollars a month, which is the cost of putting them out. These window

"HOME SWEET HOME"



HAPPY indeed is this young couple. Why? Because they have themselves and an **Edison Phonograph** to entertain themselves with.

Not only the young; but also the old can be made happy with an

EDISON

Now why not make this Xmas a real Happy one? **A REAL**

"Home Sweet Home?"

That's what you will make it if you let us sell you one of our **Edison Phonographs**.

Pfefferle's Reliable Drug Store



A FEW of the Many Types of **Edison Phonographs**

we always carry on hand

Call and inspect our line and get our terms before purchasing a Talking Machine. It will pay you, as we positively guarantee to save you money by the good service we give you. Remember, we will keep your Machine in repair **FREE** of charge. We make a specialty of the Phonograph Business and have the only complete line in this part of the state. So don't be influenced by any one to send away to Chicago or elsewhere for a Talking Machine; as we positively guarantee to give you a **BETTER DEAL** than you can obtain anywhere else.

Eugene A. Pfefferle
THE RELIABLE DRUGGIST.

Two sections of a three-paneled folder distributed by Mr. Pfefferle.

wooden horn, for \$55.00. With these we can accommodate the poor man as well as the rich. When a customer wants the best machine made, we send to our jobber for an Amberol, a two-hundred dollar instrument, which has no horn. It is set in a cabinet about six feet high and built of oak or mahogany. A record is put on one of the machines and played. Meanwhile we describe the fine points in which the Edison excels others. It has a softer tone and requires no pin changing as does the Victor.

We have an easy payment plan for our phonograph sales, namely, fifty cents a week on machines under twenty-seven dollars, and one dollar a week for machines over that price. All people buying a phonograph on our

displays come every month. One of our windows is always trimmed with these phonograph displays. They are a good advertisement for us and the Edison Co. We get our Edison phonographs from a jobber in Minneapolis, T. H. Tucker. We only trade with one, getting the best service this way. The records come from the same jobber in lots of one to two hundred in one shipment, usually every two weeks. We have the right to send back ten per cent of all we order every three months. This keeps our stock clean all the time.

THE PROFIT.

The profit on the records is very good. On two-minute or Standard records there is a clean profit of 40 per cent, taking 10 per cent

off for breakage. On the Amberol records there is a profit of 55 per cent. These are the four-minute records.

On the same machine costing \$15.00 there is a profit of 33 per cent; on the \$27.00 machine the profit is 45 per cent; and on our largest the profit is 52 per cent, which is as much as any side-line can make. When we sell a person a phonograph, it isn't the last time we see him. He always returns to buy more records, and any other article that may catch his eye in the store.

One thing a person should refrain from in handling phonographs—that is, playing for loafers. It keeps the ladies away, and it is a poor policy generally to have any loafers around.

IS THIS AN AVERAGE AUTOBIOGRAPHY?

The Self-told Sketch of a Western Lad Who, Tiring of Life on the Ranch, Entertained Pharmaceutical Ambitions—Migrating to the City He Followed His Bent, Finally Becoming the Owner of a Store—How Time Worked Changes in His Views.

By an "EVERY-DAY DRUGGIST."

I spent my youth in western Kansas, herding sheep on the prairies in summer-time, going barefooted and clad in overalls. For 4 or 5 months during the winter-time I attended the district school. When herding sheep, sometimes as many as 5000 in a single herd, my only companions were my Indian pony, my faithful dog, and rifle. My only diversions were drawing designs in the sands, killing an occasional coyote or a gray wolf as it sneaked around a hill in quest of a fresh mutton dinner, the frequent killing of rattlesnakes, the watching of the prairie-dogs in their towns, many of which covered hundreds of acres, and a thousand other things of a similar monotonous nature, not the least of which was the constant and ever-changing panorama of cloud and sky and the weird, fantastic images of the mirage.

In dry seasons many were the exciting runs made to avoid the devastating course of prairie fires, and in wet seasons there was the constant danger of severe hail or wind storms before which the sheep would drift for miles, and no amount of effort could stop them. All this

sounds exciting enough, but, as a matter of fact, it was one of the most monotonous lives imaginable. I know from experience.

BEHIND THE PLOW.

When I grew a little older I entered upon the farm work connected with the sheep ranch. Many a day I put in behind "Star" and "Buck," the ox team, plowing, seeding and harvesting the grain necessary to winter the sheep and to feed the horses and cattle of the ranch. I always went to school during the short winter terms. A little later I went to the school in the neighboring town, riding my horse in and out the 5 miles, nights and mornings. Then one day word was received from a relative in an adjoining State that I might come and have the advantages of schooling in a larger town and work in a store to pay my board.

This relative it happened owned a drug store, and I went, not that I preferred a drug store position to anything else, but because it offered an escape from the monotonous life of the western sheep ranch. Perhaps while herd-

ing sheep on the limitless plains, with nothing to think about except the future, the idea may have come to me that I was capable of bigger and better things, of great achievements. Where is the boy who does not have these thoughts? At any rate this opening seemed the really greatest thing in my life.

I rode the distance, over 300 miles, on my pony, sleeping out at nights with no roof but the sky, no bed but my blanket, and my saddle for a pillow. My pony was picketed out near-by.

I was then only a little boy, scarcely tall enough to see over the tops of the high, round-top show-cases which were then the only kind, but which are now seldom, if ever, seen.

COMING TO TOWN.

One can imagine the appearance a green country boy, just off the range and entirely a stranger to city ways, made as a city drug store "cubby." But no one can realize the crash of my air castles. The disillusionment, the knowledge of my own ignorance, the ridicule of my boy playmates, and the homesickness of my first year or so as an embryo druggist, all bore heavily upon me.

But, be it said to my credit, I hung on. Perhaps the knowledge that, if I gave up, it meant a return to the ranch and to "Star" and "Buck," to experience again the heat of summer and the cold of winter, mere memory of the monotonous grind of my former life, made me stick it out. Be that as it may, I staid until the "green" wore off and eventually a liking for the business began to take possession of me.

This liking for the drug business is a peculiar thing. It is like the "old man-of the sea" story. If it once gets its clutch on you, you are doomed! Did you ever know of a druggist to change his profession? Mighty few ever do.

Well, I clerked for years, and all the time was possessed of one idea. I never lost sight of it. From my first day in the drug store, I looked forward to the time when I would be a proprietor. My aim was always to this point. I would think how I would do this, or that if I were boss. One thing I was quite sure of. When I got to be boss, my clerks wouldn't have to work so hard nor so long as I had when I was a clerk. And when I took

charge, I wouldn't toil so hard and fool around over the little things as my chiefs had done.

By and by I got up nerve enough to take the State board examination and passed. Then, of course, I got a better job, and after a while a still better one, and in the course of time attained the object of my goal. I became a proprietor.

TAKING THE REINS HIMSELF.

I have been running a drug store now for several years. I was saying the other day how my youthful views have changed. Since I have been in business for myself, I have worked harder than ever. I not only have the small details of the business to look after, but the rest of it also. I feel that no one can do anything as I want it done, all the time. I keep my clerks as long as the average druggist does. But I confess they get better offers from other places, or they prove unsatisfactory and I have to let them go.

I notice, too, that my clerks' hours are as long as others and that they seem to work just as hard.

I used to tell how I "would set things on fire" when I got to running a drug store. But there hasn't been any conflagration yet, and I have been at it for years now. I used to say that I would own a fine home and have a splendid team and carriage and live in style. I have a nice little home, but no better than my neighbors, and no one yet has seen my "splendid team and carriage." True, I had an automobile a year or so ago, a little runabout that my family and I used to go out in occasionally. But I sold it. I couldn't afford the gasoline and oil. Besides, I didn't have the time to use it. The style I used to tell about hasn't materialized either and doesn't seem to be headed my way very fast.

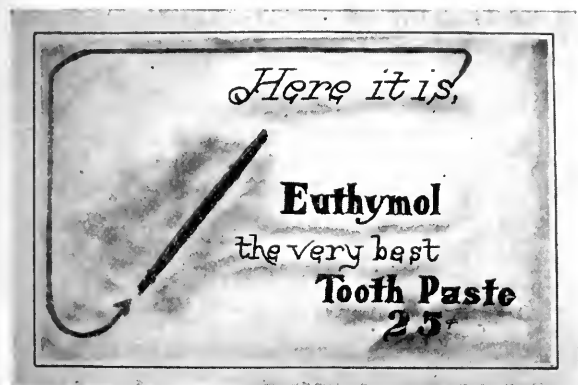
I work from early morning till late at night 365 days in the year and every fourth year 366. I am just an ordinary every-day druggist, no better off than the majority, perhaps not so well off. But I seem contented and am happy in the possession of a handsome little drug store. I am respected in the community and have confidence in my fellow-men and in myself. My home life is pleasant and happy. After all, the question is, am I a success? I don't think so. It all depends on how you look at it.

WRITING SHOW-CARDS WITH A NEBULIZER.

A "Glaseptic Nebulizer" Used for the Purpose—It Makes an Excellent Substitute for the More Expensive Air-brush—Specimens of Signs Produced with It.

By ALEX F. PETERSON,
Missoula, Montana.

From the time of making my first attempts at show-card writing, it has been my greatest desire to possess an air-brush. But the cost



of one, together with the equipment necessary to operate it successfully, has always seemed to require too large an investment, considering the limited use to which it could be put in a drug store.

Atomizers were suggested by one card-writer as a substitute, but after experimenting



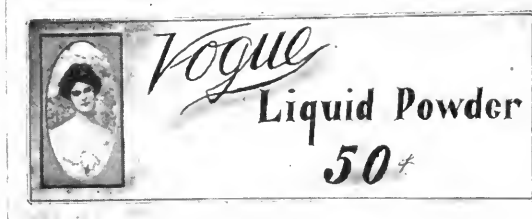
with several kinds I was compelled to give it up as a failure. These did very well in producing "spatter" work, which, by the way, helps to make signs attractive. But none threw a spray finely enough divided to give even a semblance of air-brush work. Consequently I have until recently been rubbing dry colors into the paper to produce shaded backgrounds.

HOW HE HIT UPON THE IDEA.

In demonstrating Parke, Davis & Co.'s "Glaseptic Nebulizer" to a customer one day I noticed that it actually vaporized the solution, and later in trying it with dyes dissolved in water I found that it spread the color on paper beautifully. But occasionally, on account of the density of the liquid, a few spots would appear. Then I made a solution of



Winsor & Newton's artists' color in turpentine, in the proportion of one tube of color to two ounces of turpentine. This proved to be the ideal color for this work, as it sprayed



easily, never spotted, and the shading could be graduated to any desired density.

With a few stencils cut out of manila drawing paper, creditable signs can be produced in this way in less time than with the brush alone.

HIS SPECIMENS.

I am submitting a few specimens of the work done with the "Glaseptic Nebulizer." The card advertising hair preparations was used in a window display. It was made with the use of stencils.

The headache tablet sign has a partly open box of the tablets glued on the card, and the exposed tablets are held in place by spreading

a thin layer of liquid glue in the bottom of box before filling.

Appropriate pictures pasted on cards and properly shaded are much more effective than when used in any other way. The two girls on the accompanying cards were cut from magazine ads.

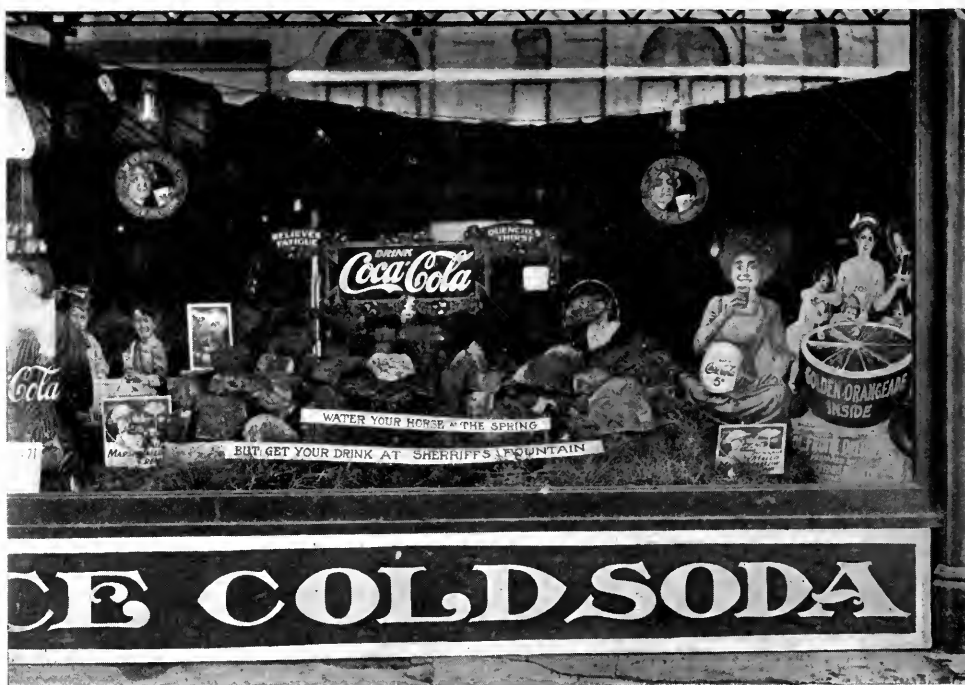
I trust others interested in card-writing will try this method and report their results.

A SODA WINDOW.

By H. M. CURRY,
Ellsworth, Kansas.

There was something cool and refreshing in the appearance of this window. The rocks, the flowing water, and the green grass combined to make a cool, inviting scene. More-

boxes. Arrange them in a sort of semicircular pyramid against the back of the window. On the floor set a tin tank 3 by 4 feet, 3 inches high, with an overflow pipe that reaches



over, they were so different from the merchandise usually displayed in a drug-store window. Every warm and thirsty wayfarer was bound to stop before this country view. It really made a whole Chautauqua crowd "sit up and take notice."

The display was built of a pile of rocks, some old boxes and a small piece of rubber hose. To construct it requires eight or ten

through the floor of the window far enough so that an old piece of hose can then be attached to it to carry off the water when it starts to run.

Next provide about four good wheelbarrow loads of small rocks of different sizes, about three square yards of sod (best taken from wild growing grass and small weeds) and one good flat rock, say 1 by 2 feet, for the fall.

Then get sufficient rubber tubing, $\frac{3}{8}$ inch, to reach from the most convenient tap, or a barrel on the upper floor, and turn on the water over the flat stone; let it drip so as to strike onto the pan or tank.

Arrange the rocks and sod as realistically as possible, not too regularly, and cover the bottom of the window and edges of the tank with the grass. Cover the bottom of the tank with sand, so that the tin does not show through.

After this photo was made, I put in a small figure of a cow and a horse that appeared to be enjoying the cool water. They were about six inches high, and, standing in the water with their noses in the green grass on the edge

of the pool, added much to the realism of the display.

The signs, of course, may be any good soda-water cut-outs, and are used to fill in the ends and back of the window. The Coca-Cola sign is suspended from a bar. The sign "Water your horse at the spring—but get *your* drink at Sherriff's soda fountain" tells the whole story. This sign looked like a fence across the front of the pool.

Use two or three ferns on top of the rocks as a finishing touch.

Some of our admiring friends say this was the best window we ever had, and although it required a little work and ingenuity, it was simple and eminently worth while.

A DRUGGIST WHO KNOWS HOW TO LIVE.

Alexander Stewart of Guelph, Ontario—Elected President of the Ontario College of Pharmacy—Pictures of His Store, His Residence, and His Riding Horse "Golden Girl."

Alexander Stewart, as the title of this article indicates, has learned the art of mixing

trate the point, and if they do not, it will be made sufficiently clear throughout the course of this short article.

Mr. Stewart was born in the township of Eramosa, county of Wellington, June 7, 1866. After he had received a preliminary education in the public schools he attended the Ontario College of Pharmacy, and was graduated in the class of 1889 with a good standing. He was the gold-medalist in dispensing, and was the third member of the class in general proficiency.

His career as a clerk had begun with Alex. B. Petrie back in 1884, but after he graduated from the Ontario College he began business for himself in Guelph, and here he may still be found. In the meantime he has served on the Council of the Ontario College of Pharmacy ever since March, 1906, and in that capacity has represented District No. 7. It was in recognition of his zeal and good judgment that he was elected to the presidency last November.

In taking the chair Mr. Stewart said at that time that he hoped to make his administration one of success. The first thing he did was to recommend that a special committee of three or four members of the Council be appointed for the purpose of touring the



Alexander Stewart.

pleasure with business. He enjoys himself. Some of the accompanying pictures will illus-

schools and colleges of pharmacy of the United States in order to gain ideas and suggestions which might be of possible use in



Mr. Stewart's pharmacy in Guelph, Ontario.

the further development of the Ontario College of Pharmacy. This was a specimen of the man's initiative and progressive character.

But it is not alone in the O. C. P. that Mr. Stewart has made himself useful, and has won recognition. In politics a Liberal, he has been secretary of the Liberal Association of the South Riding of Wellington. He has been an alderman of the city of Guelph. For two years now he has been president of the Board of Trade of Guelph, and he has served on the Committee of the Guelph Gen-



Mr. Stewart's residence.

eral Hospital. During his membership in the Council of the Ontario College, he has been chairman of the Educational Committee and has done excellent work in this position.

To show further that Mr. Stewart is a man of broad interests, and that he believes in living the full life, it may be said that he is a member of the following clubs in Toronto: The National Club, the Ontario Liberal Club, and the Royal Canadian Yacht Club. In the

city of Guelph he is a member of the Priory Club, the Canadian Club, St. Andrew's Society, the Guelph Fat Stock Society, and the Guelph Horticultural Society. At the present time he is secretary of the Guelph Horse Show Association, and a director of the South Wellington Agricultural Society.

As a couple of our pictures will suggest,



Mr. Stewart and his beautiful horse, "Golden Girl."

Mr. Stewart is very fond of riding and driving. His riding horse, "Golden Girl," is a famous steed, and we present a couple of pictures showing Mr. Stewart astride her.

As for Mr. Stewart's pharmacy, this is one of the neatest, best-arranged, and most prosperous in the Province of Ontario. A specialty is made of hospital, physicians' and



Mr. Stewart enjoying a cross-country run with "Golden Girl."

nurses' supplies, and Mr. Stewart gets out under his own label a number of pharmaceutical and toilet specialties which apparently enjoy a sale outside of his own store.

How the Druggist's Sundries Are Made.

FIFTH PAPER: ESSENTIAL OILS.

The Industry Chiefly European—France Particularly Excels—Enormous Quantities of Flowers Collected Annually—The Various Methods of Separating the Oils and Their Bearing on the Price—Some Synthetic Products that Verge Closely on the Natural.

By DANIEL M. GROSH,
Philadelphia.

When one considers that the United States produces annually essential oils to the value of \$500,000, and the little town of Grasse in the south of France twelve to fifteen times as much, it certainly furnishes food for reflection.



Caraway field on the right, first year, Holland.

tion. Why this condition of affairs exists is hard to understand, as all authorities agree that we possess the necessary climatic conditions in our diversified climate both in the east and in the west. The technical and practical knowledge of floriculture and extraction of the oils is not a prohibitive proposition, nor does it require such training and experience as American ingenuity could not acquire. Furthermore, a benevolent and protective tariff would work to the interest of the manufacturer. Excluding 150,000 pounds of oil of peppermint produced yearly, which is less than one-half of Japan's contribution, the output of natural essential oils is too small to be seriously considered.

The essential oil industry may be roughly divided into three divisions, the expression of natural oils, the fabrication of artificial and synthetic oils, and the general perfumery business. The natural production will be discussed and the artificial production considered only in relation to the natural product. It is a peculiar fact that the enormous production of the arti-

ficial products has not in any way curtailed or retarded the output or reduced the demand for the natural article. Nor has it in any way reduced the price. The price of vanilla beans remains the same, regardless of the quantity of vanillin produced. All other natural products likewise remain unaffected by competition with the synthetic products. This demonstrates that the industry is so firmly established that it has nothing to fear except competition in its own particular class.

OILS A FOREIGN INDUSTRY.

When the little town of Grasse can produce annually ten billion pounds of flowers and furnish the inhabitants with continuous employment throughout the year, it certainly seems that this great country should have some small section with equal facilities.

The industry is always sure of a demand and a market, for the substantial reason that



Mowing caraway in Holland.

the higher grades of perfumes absolutely require the natural product. The synthetic article may be used for the cheaper grades, but is lacking in certain essential qualities that are found only in the natural oil. Consequently, there is no danger of the natural oils being forced out of existence, as has happened to the indigo and alizarin colors in the dyeing industry.

The industry, both in the field and factory, has been studied and experimented upon by the French producers down to the minutest detail, and they have attained absolute perfection



Extraction of bergamot oil: Group of workmen in Italy.

both in purity of product and volume of output. They continually strive to excel, both as a matter of business and self-protection, as they must keep up the quality of their products regardless of conditions and circumstances. They study out all possible influences on the growth of the plants, such as temperature, light, humidity, nature of soil, proper time of harvesting, etc., and necessarily each individual species must be studied separately.

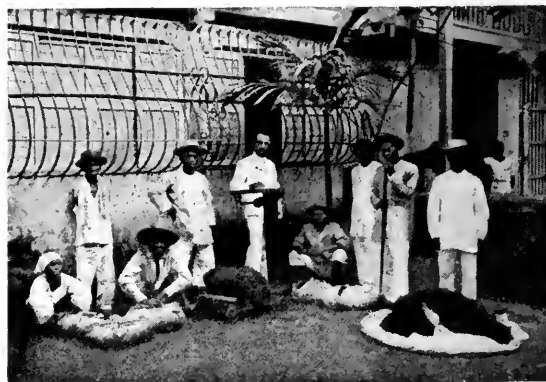
GATHERING THE FLOWERS.

The year commencing in March and April with the violets and the jonquils, almost one million pounds of violets and about 35,000 pounds of jonquils are cultivated and gathered. In May and June come the roses; almost three and a half million pounds are gathered, which have to be picked over twice to separate the injurious pistils from the perfume-giving petals. These two months are also given to the orange flowers, four and a half million pounds. In June and July the thyme and rosemary, also the myrtle, are gathered. August and September produce 175,000 pounds of tuberose, one and a half million pounds of jasmine, 65,000 pounds of aspic, and 200,000 pounds of lavender. The red geranium appears in September and October. The floral year

finally ends in October and November with cassie flowers. December, January, and February are occupied in preparing for the new year and winding up the old.

When one realizes the slight weight of a floral blossom and the number required to make a pound, the actual volume gathered yearly seems almost incredible, and yet this is from only one small section.

The process of extraction of the oils is simple and familiar to most all, and will be dwelt on but slightly. Four methods are used. There is distillation, in which the flowers are distilled with steam. The steam is condensed and the oil separated from the water, which is either used over again in a fresh charge or sold as distilled waters, of which about four million quarts are marketed yearly. For the more delicate flowers the cold maceration process is used, which produces the finest products. The flowers are macerated in the purest lard on glass plates. When the pomade, as it is termed, becomes saturated with perfume, the oil is extracted by agitation with alcohol and evaporated to concentration. The hot maceration process is similar to the foregoing method except that hot lard is used, and the pomade is obtained by filtration and pres-



Ylang-ylang blossoms arriving at the works in Java.

sure. The most modern process consists of using a volatile solvent, a light petroleum spirit, distilling and evaporating in a vacuum which gives the perfume in a solid form. The maceration process gives a larger volume of product than the other methods.

The alcoholic concentrations are termed quintessences, and the prices depend, of course, with regard to quantity and quality, upon the extractive methods employed. A pound of violet essence extracted by the cold process

brings \$1350, while by the petroleum process it costs only \$160. A pound of oil of orange flowers made by steam distillation is valued at \$35; by spirit distillation \$72; and by cold maceration \$135.

During the intervals of flower-picking the stills are kept busy with cinnamon, cloves, sandal, and other exotic plants of other localities which are imported for expression.

SYNTHETIC OILS.

The relation which the synthetic oils bear to the natural is interesting from every viewpoint. The vegetable kingdom furnishes nearly all the parent products for the manufacture of synthetic oils. Two exceptions may be noted in benzaldehyde and methyl salicylate, which are coal-tar preparations.

Vanillin is manufactured from many



Ylang-ylang oil distillation in Java.

sources, ranging from asafetida to potato peelings. About 25,000 pounds of vanillin are produced annually. The price has been so reduced that it is hard to realize that but a few years back vanillin was worth \$55 a pound. The laboratory has given us heliotropin, which supplies a perfume different from that made from the natural oil of heliotrope. It is made from saffrol, which itself occurs in oil of sassafras and camphor oil. Terpineol with its lilac odor is obtained from turpentine after many reactions. It is another well-known product.

The rival of the violet is found in ionone, made from oil of lemon and lemongrass oil. Isoeugenol gives the replica of the carnation, and so on down the long list of floral odors which are successfully fabricated and fulfil many requirements, especially soap-making. In that industry the synthetic oils often give better satisfaction than the natural, being more resistant to the action of the alkalies. It is astonishing that the large and constantly increasing amounts of synthetic oils marketed and used have in no way reduced the demand or output of the natural product, or at least influenced the prices. Not only has the price been maintained, but the cultivation and production have been greatly increased and larger quantities imported.

The prime requirement in both natural and artificial goods is absolute purity. Notwithstanding this fact, the oils imported to America have been grossly and scandalously adulterated. Fortunately the laboratory can by scientific methods determine and ascertain the quality.

THE OLFACTORY SENSE.

The manufacture of perfumery or the blending of odors is so extensive as to be beyond the scope of an article of this nature. The great or successful perfumer is, like the poet or musician, born, not made. The odors may be compared to the notes of the musician or the colors of the artist. An impure odor like a false note or a wrong color may destroy an otherwise perfect combination. The sense of smell becomes so trained and acute as to be developed into a special gift of nature in itself. Odors may be qualified or distinguished only by the individual nasal organ. They cannot be recorded, measured, or qualified mechanically as can heat, light, sound, or sight. The created perfumes are a blending of the various oils and essences, and no single odor alone has the necessary perfume requirements, namely, penetration, persistence, and pleasantness.



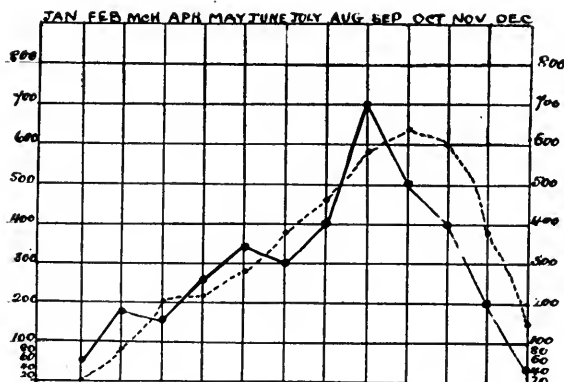
DOLLAR IDEAS

A GRAPHIC METHOD OF RECORDING SALES.

Ernest C. Cripps, Berkhamsted, England:

All druggists who market their own specialties should have some method of recording the sales of these goods. So far as the actual numbers of bottles or packages are concerned, if an account of every dozen put up is kept, the number left in stock at a given time will show the actual sales. But something more than that is needed. One wants to know at a glance whether sales are increasing or decreasing, and also in what month one should expect an increase or decrease. Furthermore, if less goods were sold than in the corresponding period twelve months ago, one will want to know the cause.

I have found that the best method of tabulating and comparing such records is by re-



A chart representing the number of photographic films developed in two successive years.

sorting to the method now adopted in our schools in teaching mathematics—i.e., the graphic chart. An explanation of the accompanying illustration will make the method quite clear. The paper, ready ruled, can be easily obtained. It is divided into small squares by horizontal and vertical lines. The heavier vertical lines represent the months of the year, while the heavier horizontal lines may stand for 10, 50, or 100, as the sales of the special preparation are large or small. The smaller horizontal divisions represent 2, 10, or 20, as the case may be. If it is required to record the weekly sales, the vertical divisions must be subdivided into four. Figures at the side may

be placed for convenience, and the months at the top and bottom.

Each chart may represent a year; or several years' records may be depicted upon the same piece of paper if colored inks are used. This latter method is the more useful, as variations can be seen at a glance.

The accompanying chart represents the number of photographic films developed last year, and the dotted line that of the previous year. There is no end to the uses to which this method may be put.

WATER-PROOFING LABELS WITH COLLODION.

J. F. Rupert, U. S. Navy Hospital Corps, U. S. S. Helena, Asiatic Station: I have found collodion a very fine preparation for rendering labels water-proof. While my experience has been mostly with typewritten labels, I have found that it works perfectly with hand-written labels.

Collodion may be applied with a camel's-hair brush which has been inserted into the cork and kept moist by immersion in the containing bottle. It may be applied immediately after the label is affixed.

Collodion prevents soiling of the label, and adds much to the life of the written label, which is of interest both to patient and dispenser. Bottles with labels so treated can be washed with impunity without danger of soaking off the label. Especially is this a help in keeping stock bottles which may become soiled neat and clean. However, it must not be understood that the preparation will stand prolonged soaking in water. Nevertheless, even this strenuous test, while it will soak the label from the bottle, will not affect the label itself, and it can be used even a second time after being detached from the bottle.

Labels on pill boxes, ointment containers, etc., may also be treated conveniently with an application of this preparation to the utmost advantage.

The flexible collodion I have found superior to the plain. The collodion solution should be quite thin and applied quickly without rebrushing of any part; it dries almost immediately.

Collodion also makes an excellent sizing

for labels which are afterwards varnished and also for notices exposed to the weather which are to be varnished. It entirely prevents staining of the paper by the oil of the varnish and prevents the paper being rendered transparent.

Grain alcohol shellac is also a good article to coat labels with, but requires more time to dry.

A SPECIAL SLIP FOR ORDERING "SHORTS."

Bixby & Potter, Republic, Kansas: When a customer requires an article not in stock we fill out a slip according to the form here shown and place it in a pigeonhole marked "To

Republic, Kans., <u>10 21</u> 191 <u>1</u> .	
Bixby & Potter,	
Please order the following for me:	
<u>1 Bottle Penex 50</u>	
<u>Paid</u>	
PROMISED	<u>10 28 11</u>
ORDERED	<u>10 23 11</u>
Signed	<u>John J. Jensen</u>

Order." Then each evening we go through these slips and include the missing items on our regular order for goods. We stamp the date of the order on the slip and place it in a pigeonhole marked "Ordered."

When the goods arrive, we wrap the slip around the article to which it belongs, bind with an elastic, and lay the package aside until called for. Or if necessary, we notify our customer the article has come in.

This is the only piece of advertising we have gotten into the schools. Our teachers all have a quantity, and numerous orders come in for books and supplies. Slips cost us \$1.50 for 2000.

A FIRELESS COOKER FOR THE PHARMACY.

Hugh M. Reid, Chicago, Ill.: A good fireless cooker will be found a valuable adjunct to any pharmacy. The uses to which it may be put are varied. Benzoinated lard, for instance, if the pharmacopoeial process is followed, will be found tedious to make. But the following process simplifies things somewhat: Heat the lard in the cooker kettle to the required temperature or a little above, add the benzoin, cover, and let it stand in the cooker for a few hours. This does away with the costly and inconvenient water-bath. The time required in the manufacture of some of the tinctures which are prepared by maceration can be materially shortened if the menstruum is first warmed and the maceration continued in the cooker. The principle can be extended to a number of other preparations, such as soap liniment and camphorated oil. In a good many cases the cooker may be replaced by a good Thermos or other vacuum bottle.

TO RESTORE YELLOW WOOD ALCOHOL.

J. A. Scott, Glencoe, Ontario: Dip the point of an ordinary indelible copying pencil into the colored alcohol sufficiently to impart a small quantity of the methylene blue to the wood alcohol. Shake, and the methylene blue will instantly neutralize the methylene yellow, restoring it to a perfectly water-white product. Care must be exercised in order that the quantity of the violet dissolved from the lead-pencil be sufficiently small.

WHITING FOR WINDOW SIGNS.

Levi Gerould, Towanda, Pa.: I use a great deal of whiting for making signs on our windows both outside and inside. When making whiting for use on the outside, I add a small quantity of powdered acacia. This hardens the mixture so that when dried it cannot be rubbed off by an inquisitive passer-by. When the window is cleaned, however, the whiting is easily washed off.

MRS. MURPHY: "So your son Dinnis fell from his airyoplane? Sure, Oi thought he was learnin' to fly in a correspondence school."

Mrs. Casey: "He was, but he stoppped short in the middle of a lesson."—*Lippincott's*.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

INTERESTING LETTER FROM A READER IN THE AFRICAN TRANSVAAL.

To the Editors:

You frequently ask readers to write you about their business, and I am taking advantage of a quiet afternoon to have a sort of one-sided chat with you. Of course, you know that the drug business here is very different from what it is in your country. Judging by a number of your articles, there is not such a terrible rush to get to the end of one's life here as with you, although we are supposed to live at a fairly high pressure.

We chemists in the Transvaal have quite easy hours compared with the rest of South Africa and other countries. We have a shop hours' bill which includes all businesses. This is how it affects us: There is no specified opening hour, but the usual custom is to open at 8 or 8:30 A.M., according to the trade in the different towns. The bill, however, specifies Sunday and holiday hours. On Monday, Tuesday, Thursday, and Friday the closing hour is 8 P.M. On Wednesday we close at 1 P.M. and open again from 7 to 8 P.M., and Saturday hours finish at 9 P.M.

Here closing is compulsory, and non-compliance is punishable by fine. This is no hardship to pharmacists, as all businesses, except tea rooms and fruit stores, must close at the same hours. Of course we are allowed to supply medicines and medical sundries at any hour. The term medical sundry might be applied to almost any article in a pharmacist's store. Night calls are not frequent.

In one of your recent issues I read of the correct way of dispensing a prescription. The article in itself was an excellent thing and the advice good if you have lots of time. It mentioned careful copying three times, checking, etc. It would not be workable in every dispensary. Many stores around this part do a private as well as a Benefit Society trade in the prescription line. In supplying the latter there is no time for copying nor checking

except by the one who dispenses, and a slow compounder is of no use. The four doctors who prescribe in this town have their evening consulting hour from six to seven, and the majority of patients prefer that hour to the morning or afternoon. Consequently quite a rush of prescriptions and orders arrive just before closing time, and I can assure you that the patients are anything but patient if kept waiting.

To facilitate dispensing we keep as many things ready as possible, such as various salts in solution, printed labels, doctors' favorite mixtures made up, and a few other helps.

As regards Benefit Societies or Sick Clubs, these are chiefly connected with the mines here. The committees of each call for tenders, annually, from the various pharmacists in the vicinity. We are usually asked to tender at so much per prescription. These prices

THE MIXTURE.

*.....teaspoonful in water
every.....hours*

W. WHYTE,
Dispensing Chemist,
ROODEPOORT

A label ready-printed to save time in rush hours.

vary quite a lot along the stretch of some 60 miles of reef, within which area work most of the miners at present. Some societies are supplied as low as 7d. (14 cents), and others as high as 1/6 (36 cents). This includes bottles, etc. Not prices to make any one's mouth water. How do your societies' tenders compare?

In the towns outside of Johannesburg, pharmacists frequently go in for such sidelines as tobaccos, sweets, stationery, seeds, school requisites, periodicals, etc. Of all these articles I find the flower and vegetable seeds the best paying. There is a good demand, no waste, and the goods are all ready in packets. The profit is about 100 per cent, and I have an agreement to have all seeds exchanged for fresh packets once a year, about July. That is our mid-winter, a time when there is not much sale for this line. I have catalogues de-

tailoring the kinds and prices, and always make a good window show with plants, cards, tools, dummy packets, etc.

You have occasional inquiries for a paste to stick labels on tin. I have used the B. P. tincture of benzoin compound for a long time and find it good. A drop or two on the tin lid and a blow with the breath to hasten the evaporation of the spirit, then the dampened label placed in position, and the tin and label stick together as long as any one will desire.

I have received many tips on store management generally from your paper, and find each issue most enjoyable reading.

Roodepoort, Transvaal.

W. WHYTE.

MORE SHOW-CARD SPECIMENS.

To the Editors:

I submit a photograph of some signs I have made. I was prompted to send it to you after



A specimen of Mr. Dudley's sign work.

seeing the article on show-card writing on page 261 of the June BULLETIN in "Business



Mr. and Mrs. Dudley.

Hints." I am also sending you a picture of the "artist" and his wife.

My work is done mostly with the air-brush.

which any one can master if he has patience. It requires practice, and the first outlay is considerable, but the results are most gratifying.

The small printing is done with a Sonneken pen, which is very rapid and can be readily learned.

J. JAY DUDLEY.

Superior, Wis.

REMOVING LYE STAINS FROM THE NAILS.

To the Editors:

As is well known to most people, immersing the hands in strong solutions of lye will cause the nails to turn jet-black. As the human nature runs to doing things easily, persons possessed of that tired feeling are prone to attempt to remove dirt, grease, etc., by the liberal use of lye.

Lye solutions are often resorted to in the operation of removing paint from metal surfaces which has been applied to prevent rusting. Unless special care is exercised, the usual result is the undesirable dyeing of the nails.

Peroxide of hydrogen, commercial solution, will remove these stains almost instantaneously. When used full strength, it will bleach out a disgusting stain, which has been present only a short time, like magic.

Stains of several days' duration can be removed in a few minutes by a little rubbing, much to the delight of the customer.

Here is an idea for the druggist, ever awake to an opportunity to add a few shekels to his strong box.

J. F. RUPERT.

U. S. Navy Hospital Corps.

U. S. S. Helena.

MAKING CASTOR OIL PALATABLE.

To the Editors:

The dispensing of castor oil over the counter or at the fountain has frequently been discussed in the BULLETIN and other papers. In my store I have no fountain, but I use what I think is the best of all methods of dispensing castor oil so that it will slip down without being seen, smelt, or tasted. It is as follows:

In a glass place about 15 grains of sodium bicarbonate, add about 4 drachms of peppermint water, and dissolve by agitation; next add about the same quantity of syrup of sarsaparilla compound or a similar tasting syrup made for the purpose; agitate again, and add the desired quantity of castor oil. Next take

about 10 grains of tartaric acid and carefully place it close to the glass at one side, and then pour upon it a small quantity of peppermint water. This dissolves the acid and carries it down, when the oil is completely enveloped in a copious effervescence. Do not stir, but let the drink be taken right down, the oil being in a large globule in the center.

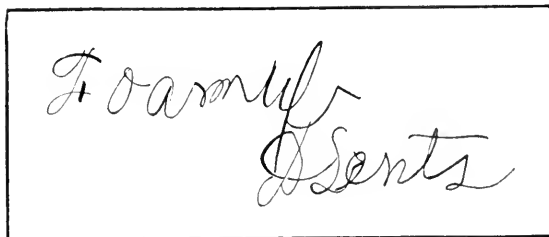
People come to me from all around to get castor oil as I dispense it.

Brooklyn, N. Y. WILLIAM F. MORGAN.

HERE'S A NEW ONE!

To the Editors:

I am sending you an order which was handed to my clerk, F. P. Theriot, the other day. "Foam up—5 cents" is certainly a unique



method of calling for hydrogen peroxide. At any rate, this product was dispensed, and the customer wasn't heard from again.

Gretna, La.

JOS. OPLATEK.

A CHINESE PUZZLE.

To the Editors:

We are sending you a Chinese puzzle, although it is not the product of a Chinese physician. It is a type of freak which we get

<p>"THE STORE THAT NEVER DISAPPOINTS"</p> <p>CHAS. E. SMITH & CO.</p> <p>PRESCRIPTION DRUGGISTS</p> <p>LONGMONT, COLO.</p>	
<p>R</p>	<p>For Date.....</p> <p style="font-size: 1.5em; font-family: cursive;"> cog c & j no V zy as duld </p> <p style="text-align: right;">.....M. D.</p>

quite frequently. It is interpreted by its author to call for calomel 1 grain, and phenolphthalein 3 grains.

CHARLES E. SMITH & Co.

Longmont, Colorado.

To the Editors:

I want to say that I enjoy reading the BULLETIN. I consider it the best pharmaceutical journal published. I. S. ZELUFF.

Brooklyn, N. Y.



TREATING HUMAN ILLS IN EAST INDIA.—This shows one of the native healers ready for business on one of the public streets or squares of a city in India. With his armamentarium spread out before him, he is ready to cure diseases on the spot and without delay! Healers of this type do a large share of the practice in India.

THE SODA FOUNTAIN.

PRIZE SODA FORMULAS.

Here are some prize soda formulas for which *The Soda Fountain* paid a dollar each:

THAT MYSTERIOUS SUNDAE.

Make a paste of thick syrup by boiling together a pint each of white cane syrup and lukewarm water with four pints of granulated sugar for four minutes. Beat the whites of four eggs to a stiff froth, and to the mixture gradually add the syrup, stirring rapidly until free from lumps. To prepare the sundae, place a split banana upon an oblong dish, and on it put a No. 10-to-the-quart dipperful of vanilla ice cream. Over all pour a ladleful of the syrup first described; on top of the ice cream put a few drops of chocolate syrup, which will serve to "stripe" the sundae.

BANANA NUT AND FRUIT SUNDAE.

Slice a good ripe banana in halves and place the pieces flat side down on an oblong hand-painted china plate; between the slices put a 20-to-the-quart mold each of vanilla ice cream and chocolate ice cream; over one of these pour some chopped pecans, and over the other some pineapple fruit. Place a cherry on each side of the molds of ice cream and top off with whipped cream. On top of the cream put a few fresh pecan meats.

EASTER SUNDAE.

Cover the bottom of a small round china plate with several leaves of lettuce; upon these place a "bird's nest" prepared with finely spun candy. In the nest place a 12-to-the-quart mold of vanilla ice cream in the form of a setting hen. Around and partially under the hen put red, white, and green cherries to represent Easter eggs.

BUTTER-SCOTCH PECAN FUDGE.

Cook over a slow fire until the mixture comes to a boil 2 pounds of sugar and 1½ pints of milk; then add ½ pound of butter, stirring until dissolved, a teaspoonful of table salt, and color a light shade with caramel; slowly pour in two teaspoonfuls of lemon juice and three handfuls of pecans. When cool, serve a scoopful on a cone of vanilla ice cream, and "dress" with whipped cream and a cherry.

SOME SELECTED FORMULAS.

EASTER SPECIAL SUNDAE.

Separate the yolks from the whites of eight eggs; beat the yolks very lightly, add 2 cupfuls of sugar, the grated rind of 1 lemon, and the juice of half a lemon; put into a double boiler and boil until a thick mixture is produced; then add 6 ounces of concentrated black raspberry syrup and a little color. Beat up the whites of the eggs, add to the mixture, and whip until very light. To serve, take a No. 12 disherful of ice cream in a sundae dish, and over it pour a ladleful of the raspberry foam, topping off with whipped cream and a whole cherry.

STRAWBERRY DREAM.

In the center of a six-inch plate put a No. 8 mound of strawberry ice cream, and over it pour a ladleful of crushed strawberries. Around the base make a double circle with whipped cream. Into the cream drop a few whole strawberries.

RAINBOW PHOSPHATE.

Into an 8-ounce glass put ½ ounce orangeade, ½ ounce pineapple syrup, ½ ounce raspberry syrup, and 1 dash of phosphate; then fill the glass with carbonated water.

STRAWBERRY FRAPPE.

Beat the whites of 8 eggs to a froth and mix with 2 pounds of pulverized sugar and ½ gallon of crushed strawberry. To serve, place a small scoopful of vanilla ice cream in a large sundae glass. Pour over the top two ladlefuls of the strawberry mixture and decorate with a maraschino cherry.

MONT BLANC.

Strawberry syrup, 1 ounce; orange syrup, ½ ounce; vanilla syrup, ½ ounce; grape juice, ½ ounce; shaved ice, ¼ glassful. Place all in a 12-ounce glass, fill with carbonated water, and top off with whipped cream. Serve with a spoon.

ATLANTIC COOLER.

Sherbet syrup, 1 ounce; red orange syrup, ½ ounce; shaved ice, 2 ounces; place in 8-ounce glass, fill with carbonated water, coarse stream. Serve with a straw.

NABISCO NUT SUNDAE.

Ground pecans, ½ pound; heavy cream, 1 quart; extract of vanilla, ½ ounce; crushed pineapple, 8 ounces. Mix, place in a bowl, which set in ice on the counter. On the side have a cup of crushed Nabisco wafers and top off the sundae with them.

ROSE TULIP PEACH.

Rose syrup, ¾ ounce; pineapple syrup, ½ ounce; orange syrup, ½ ounce; sweet cream, 4 ounces; shaved ice, ¼ glassful. Shake, strain, toss, and serve. Dress with whipped cream.

PINEAPPLE FRAPPE.

Pineapple syrup, 1½ ounces; ice cream, 2 ounces; sweet cream, 3 ounces; cracked ice, ¼ glassful. Shake, strain, toss, and serve.

STRAWBERRY TARTLETS.

Fill shells of fine pastry with fresh strawberries dusted with powdered sugar. Flavor some stiff, beaten cream with a little orange or pineapple juice and heap it over the berries. Then sprinkle with a small quantity of macaroons and serve immediately.

PERCY'S FAVORITE.

Pineapple syrup, ½ ounce; raspberry syrup, ½ ounce; vanilla syrup, ½ ounce; 1 egg; shaved ice, ½ glassful; milk to nearly fill the glass. Shake well, strain into a 12-ounce glass, and fill with carbonated water, fine stream. Sprinkle powdered nutmeg on top.

COFFEE FLIP.

Into a 12-ounce glass put 1½ ounces of coffee syrup; add 1 fresh egg, 1 teaspoonful malted milk, ½ glassful shaved ice, 1½ ounces sweet cream or a ladleful of ice cream; shake, and when the ice cream is dissolved,

strain into a 12-ounce glass, and nearly fill with carbonated water, coarse stream, finishing with fine stream.

CLARET LEMONADE.

Into a 10-ounce glass put 2 ounces shaved ice, the juice of 1 lemon, and 2 ounces claret syrup. Shake well, nearly fill the glass with carbonated water, stir, strain, add one slice of lemon and enough carbonated water to fill the glass; serve with two straws.

TEXAS FRUIT PUNCH.

Put a large cake of ice in a punch bowl and add the juice of 3 lemons and 3 oranges, 2 quarts of claret syrup, 1 quart of champagne syrup, and $\frac{1}{2}$ ounce of fruit acid; then add to the mixture thin slices of 1 orange and 1 lemon. Use a ladle and serve 2 ounces in a phosphate glass, filling with carbonated water, coarse stream.

FROZEN FRUITS.

Take of the ripest of raspberries, currants, or strawberries, as desired; press the fruit through a hair sieve into an earthenware crock. To every 5 pounds of pulp, add $2\frac{1}{2}$ pounds of sugar, 1 quart of water, and the juice of 2 lemons or oranges. Freeze in the same manner as you would ice cream, and when frozen, put it at once into porcelain-lined cans or an earthenware dish, well packed in ice and salt.

SPECIAL CHERRY MILK.

Cherry syrup, 1 ounce; banana syrup, $\frac{1}{2}$ ounce; whipped cream, $\frac{1}{2}$ ounce; shaved ice, a sufficient quantity. Place in a 10-ounce glass, fill with milk, and serve with a spoon and straw.

CHOCOLATE FLUFF.

Vanilla cream, 1 ounce; chocolate syrup, 1 ounce; whipped cream, 1 ounce; fill glass with carbonated water, add a red cherry, and serve with a spoon and straw.

AMERICAN FRAPPE.

Mint syrup, 1 ounce; wintergreen syrup, 1 ounce; sweet cream, 1 ounce; 1 No. 16-to-the-quart ladleful of vanilla ice cream; shake well, strain, fill glass with carbonated water, fine stream, and top with whipped cream. Serve in regular frappe style.

BISMARCK SUNDAE.

Into a sundae cup put a ladleful of vanilla ice cream and then add some chopped dates and figs. Over these pour some maple syrup and top off with whipped cream.

BLACK HAWK SUNDAE.

Mix crushed blackberries with grated black walnuts and place them in a sundae dish containing a dipperful of vanilla ice cream; top with whipped cream and 1 maraschino cherry.

STRAWBERRY SHORTCAKE FRAPPE.

Purchase a cake of "angel food," 18 inches long. Cut it into thin slices, put a slice on a plate, and on the cake place a small cone of cream; cover with strawberries and top off with whipped cream. If a suitable cake cannot be obtained, use Nabisco wafers.

HIGH SCHOOL SUNDAE.

Take three portions (No. 16 disher) of vanilla or chocolate ice cream and place them to mark the points of an imaginary triangle drawn on a flat ice-cream

saucer; then place some whipped cream in the center and sprinkle over with finely chopped walnuts, or a maraschino cherry may be used.

ARCADIAN DREAM.

Into a 14-ounce glass put 3 ounces of shaved ice, a small spoonful of ice cream, 1 ounce of milk, $\frac{1}{2}$ ounce of vanilla syrup, $1\frac{1}{2}$ ounces of Catawba syrup, and a teaspoonful each of crushed raspberries and crushed strawberries. Shake well, then fill the glass with carbonated water (fine stream), and serve with a spoon. Sells for 15 cents.

ALABAMA SPECIAL.

Pineapple syrup, 2 ounces; grape juice, 1 ounce. Place in a 14-ounce glass, add the juice of half a lemon and 2 ounces of lemon ice. Fill the glass with carbonated water, fine stream, and mix. Decorate with a cherry and serve with a spoon.

SOME IDEAS FOR THE FOUNTAIN.

BY GEORGE GALANE, NEWARK, N. J.

I have a novel and attractive display in our window advertising the soda fountain. It is attracting a great deal of attention on the part of the public, for amazement is expressed at the never-melting ice cream. This ice cream consists of plaster of Paris and water, made into a paste and molded to the likeness of a scoop of ice cream.

Upon the artificial ice cream I have crushed fruit, nuts, cherries, etc. Some of the dishes are:

Cantaloupe sundae.
Strawberry sponge.
Banana split.
Fruit salad.
Fruit sundae.
Sliced peach sundae.

Beside each dish I have a placard, hand printed by myself, giving the name and price of the dish.

CANTALOUPE SUNDAE.

I find the special cantaloupe sundae a good seller. The price is 15 cents. Take half a cantaloupe, remove the seeds, put ice cream in it, add fruit and whipped cream and serve.

These weekly displays in the show-window are bringing many new customers to our fountain, who go away perfectly pleased with the sundaes and the service.

In Menk's Pharmacy, where I am employed, we use a menu at the fountain. It reads as follows:

MENU.

<i>Sundaes.</i>			
Banana Split	15c	Raspberry Nut	10c
Broadway	10c	Strawberry	10c
Cherry	10c	Strawberry Nut	10c
Cherry Nut	10c	Strawberry Sponge	15c
Chocolate	10c	Turkey Trot	15c
Chocolate Marshmallow	10c	Tutti Frutti	10c
Chocolate Fudge	10c	Vanilla	10c
Chocolate Nut	10c		
Chop Suey	10c	<i>Lemonades.</i>	
Fruit Marshmallow	15c	Egg	15c
Fruit Salad	10c	Fruit	10c
Grape	10c	Grape	10c
Lemon	10c	Lemonade (Plain)	10c
Malted Milk	10c	Mint	10c
Marshmallow	10c	Orange	10c
Mint	10c	Seltzer	10c
Nabisco	10c		
Nut Pudding	10c	<i>Ice Cream Sodas, 10c.</i>	
Orange	10c	Cherry.	
Peach	10c	Chocolate.	
Pineapple	10c	Chocolate Mint.	
Raspberry	10c	Coffee.	
		Ginger.	

Grape.
Lemon.
Mint.
Orange.
Peach.
Pineapple.
Punch and Judy.
Raspberry.
Sarsaparilla.
Strawberry.
Vanilla.

Specials.

Broadway Flip20c
Chocolate Flip20c
Chocolate Float15c
Coffee Flip20c
Coffee Float15c
Frozen Mint10c
Grape Punch10c
Vanilla Flip20c
Vanilla Float15c

Egg Drinks.

Egg Broadway10c
Egg Chocolate10c
Egg Coffee10c
Egg and Cream10c
Egg Flip15c
Egg Lemonade15c
Egg Limeade15c
Egg Malted Milk15c
Egg Nogg10c
Egg Orangeade15c
Egg Phosphate10c
Egg Vanilla10c

Phosphates.

Cherry5c
Grape5c
Lemon5c
Mint Rickey5c
Pineapple5c
Raspberry5c
Strawberry5c
Cherry Smash5c
Coca Cola5c
Moxie5c
Root Beer5c
Punch and Judy5c

Milk Shakes 5c and 10c.

Chocolate.
Cherry.
Coffee.
Peach.
Pineapple.
Raspberry.
Strawberry.
Vanilla.

Mineral Waters.

Abilena15c
Apollinaris15c
Buffalo Lithia10c
Congress15c
Hunyadi Janos10c
Imported Vichy10c
Pluto10c
Red Raven Splits.....15c
Saratoga Vichy10c
Veronica15c

SOME ICE CREAMS.**CHOCOLATE.**

Melt 10 ounces chocolate and make a paste of it with hot water to keep it warm until wanted. Cook 1 dozen eggs and 1½ pounds sugar in 2 quarts cream. Add the chocolate and work it in while hot; cool and freeze in the usual way.

ORANGE.

Four quarts of cream, 2 large oranges and 1 lemon are required, with an addition of 2 pounds of sugar. Secure the orange flavor by rubbing off the rind on lump sugar. In default of hard sugar you may grate off the yellow skin on a grater. Be careful not to rub off the white pith beneath the surface. By using sugar, you will have the essential oil embedded in it, producing a flavor in all its purity and strength. This mixed in turn with the juice will give a rich flavor for either confection, beverage, or cream.

STRAWBERRY.

Take four quarts of cream, 2½ pounds of powdered sugar, enough ripe strawberries passed through a sieve to make one quart of juice and mix them all together. Add a little color if necessary, although fresh berries need little coloring. Strain and freeze at once. When mixed together it should not be left standing, as the juice will tend to curdle the cream.

PEACH.

Take 2 quarts of cream, 1 pound of sugar, enough good, ripe peaches, mashed and passed through a sieve, to make one pint of juice, and mixed with a little syrup or fine sugar. This is all stirred together and frozen at once. All fruits which contain acid, being of a tart nature, cannot be left standing after being incorporated with the cream, therefore it is advisable to add the juice when the batch is nearly frozen. A little pink coloring is preferred by some ice-cream makers; this, of course, is only a matter of taste.

ADVERTISING THE SODA FOUNTAIN.

Walter L. Rosenberger, writing in *The Soda Fountain*, calls attention to the advisability of advertising the soda department of a store. Here are some excerpts from pamphlets that Mr. Rosenberger suggests for the purpose:

1. CLEANLINESS AND QUALITY.

You know of the quality of the goods we use at our fountain, and we wish to tell you of the extra care we take for your protection of health. By protecting your health, we gain your confidence; your confidence results in our profits. We use every care to have every piece of glass or china used at our fountain **CLEANED ESPECIALLY FOR YOU.** That is the reason we wash all our utensils and glasses with hot water and soap. Cold water will not remove grease or germs, and when you see the sparkle of our glasses, and the polish on our spoons, you are insured that everything is done to insure cleanliness.

2. WARM WEATHER AND HEALTH.

The hot weather is upon us, and all health authorities tell you the best thing to do is to keep cool, do not overeat, and take things easy. We are in the position of helping you carry out the suggestion of the Department of Health, for our every effort at the fountain is to keep you cool. We make it so pleasant that you cannot possibly fret, and our ice-cream soda and sundaes are just the thing to quench that thirst and satisfy your appetite, and still do you a world of good.

3. YOU HAVE BEEN AWAY: WE HAVE MISSED YOU.

There is no doubt about our missing you, but you have been missing the fine quality of our soda and ice-cream sundaes which are all prepared especially for you. The clean way in which everything is served and the quality of the fruits and syrups used have resulted in this being the busiest year we have ever experienced at our fountain. Come in and you will agree with us that we have deserved the business.

FOR PREPARING LEMON BEVERAGES.

[From *The Spatula*.]

SODA LEMON.

This may be prepared either from the lemonade syrup or directly from the fruit. The only difference between them is that you cannot shake a lemonade made with any charged water, but must of necessity mix with a spoon. Sugar should never be used for sweetening lemonades made with carbonated water, as it causes it to effervesce and liberate the gas, making the drink flat.

LEMONADE.

This name applies to that class of drinks of which the lemon is the base, and it is not surpassed by any of the more modern drinks, in its power to quench a burning thirst. Of all the fancy soda fountain beverages, none admits of so many variations, or seems so generally popular, as the lemonade in some form.

PLAIN OLD-FASHIONED LEMONADE.

To make a plain old-time lemonade seems an easy task, but I have known men to walk by a dozen fountains to secure a good one properly prepared. The important thing is to correctly sweeten a lemonade, and, for the purpose of accuracy, simple syrup is preferable to sugar.

There is a difference in tastes as to the sweetness of drinks, but the majority of people do not like a drink too sweet. Aim to please the majority, but realize that it is easier to add a little sweetening than to fix a lemonade that is too sweet.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

Pricing Prescriptions.—

David H. Gordon contributes to the *Druggists' Circular* the schedule of prescription prices in vogue in the store of Coursey & Munn, Atlanta, Ga. He says: "This system is not without a flaw or exception, but we have followed the policy of marking a prescription 'special price' when not priced according to this chart. In looking over the file of about 20,000 prescriptions we find less than 150 marked 'special.'"

The rules for pricing and the schedule of prices follow:

Price no prescription at a profit of less than 100 per cent unless it be for an original bottle of some specialty or "patent" medicine. Use your best judgment in applying the following rules to the prescription and remember that the party may want to get a copy and compare your price with that of other druggists:

1. When handed a copied prescription from a cutter, allow no rule to influence you in making a price.
2. The moral effect is what we are after.
3. Always impress the customer with the fact that we save them money on prescriptions, because we sell "patents" at reasonable figures.

Liquids.

(Where dose is a teaspoonful)

For 2 ounces or less.....	\$0.25
From ½ oz. to 1 oz.....	.35
From 1 oz. to 2 ozs.....	.40
From 2 ozs. to 3 ozs.....	.50
From 3 ozs. to 4 ozs.....	.65
From 6 ozs. to 8 ozs.....	.85
From 8 ozs. to 12 ozs.....	1.00

Liquids for External Use.

For 1 oz. or less.....	\$0.25
From 1 to 2 ozs.....	.35
From 2 to 3 ozs.....	.40
From 3 to 4 ozs.....	.50
From 4 to 6 ozs.....	.65
From 6 to 8 ozs.....	.75

Shop Pills.

For 12 or less.....	\$0.25
From 12 to 18.....	.35
From 18 to 24.....	.40
From 24 to 36.....	.50
From 36 to 48.....	.65

Hypodermic Tablets.

(100 per cent on net invoice price.)

For 3 or less.....	\$0.25
For 4.....	.35
From 4 to 6.....	.50
From 6 to 8.....	.65
From 9 to 12.....	.75
From 12 to 16.....	1.00

Powders.

For 6 or less.....	\$0.25
From 6 to 8.....	.35
From 8 to 12.....	.40
From 12 to 15.....	.50
From 15 to 24.....	.65
From 24 to 30.....	.75
From 30 to 36.....	.85
From 36 to 48.....	1.00
From 48 to 60.....	1.25

Konseals.

For 4 or less.....	\$0.25
From 4 to 6.....	.35
From 6 to 8.....	.40
From 8 to 12.....	.50
From 12 to 24.....	.75
From 24 to 36.....	1.00

Liquids.

(Where dose is two teaspoonfuls.)

For 1 ounce or less.....	\$0.25
From 1 oz. to 2 ozs.....	.35
From 2 ozs. to 3 ozs.....	.40
From 3 ozs. to 4 ozs.....	.50
From 4 ozs. to 6 ozs.....	.65
From 8 ozs. to 12 ozs.....	.90
From 12 ozs. to 16 ozs.....	1.25

Ointments.

For ½ oz. or less.....	\$0.25
From ½ to 1 oz.....	.35
From 1 to 2 ozs.....	.50
From 2 to 4 ozs.....	.75
From 4 to 8 ozs.....	1.00

Hand Made Pills.

For 6 or less.....	\$0.25
From 6 to 8.....	.35
From 8 to 12.....	.40
From 12 to 24.....	.65
From 24 to 36.....	.85

Hypodermic Tablets.

(100 per cent on net invoice price.)

For 1 oz. or less.....	\$0.25
From 1 to 2 ozs.....	.35
From 2 to 4 ozs.....	.50
From 4 to 8 ozs.....	.75
From 8 to 12 ozs.....	.85
From 12 to 16 ozs.....	1.00

Capsules.

For 8 or less.....	\$0.25
From 8 to 12.....	.35
From 12 to 15.....	.40
From 15 to 24.....	.65
From 24 to 36.....	.75
From 36 to 48.....	.90
From 48 to 60.....	1.00
From 60 to 75.....	1.25
From 75 to 100.....	1.50

Bulk Powders.

For 1 oz. or less.....	\$0.25
From 1 to 2 ozs.....	.35
From 2 to 4 ozs.....	.40
From 4 to 6 ozs.....	.50
From 6 to 8 ozs.....	.65
From 8 to 16 ozs.....	.75

A First-class Prescription Ad.—

J. P. Cannon & Sons, of McKenzie, Tenn., are aggressive advertisers. Here is one of their prescription ads. which they ran in their local paper. It was 4½ by 8 inches in dimensions:

Some Things For You To Think About

When you are sick and call a doctor, you select the doctor that you consider the best in town; then you should choose your druggist with the same care that you choose your doctor.

Get the old idea out of your head that you must take your prescription to the druggist whose name is on the prescription blank. Select your druggist with the same care that you selected your doctor and then send the prescription to him.

When your doctor prescribes certain medicines he expects certain results; to get these results, the druggist who fills your prescription must not merely know how to put a little of this and a little of that together, but must have the knowledge and experience to read the doctor's prescription correctly, and we know how to do both of these.

Cannon's Drug Store has been filling prescriptions EVERY DAY since 1875 (thirty-seven years), and every prescription has been filled by a registered licensed pharmacist.

For the welfare of your family we ask that you bring your prescription to our store and have it filled, and then you will know that it is filled correctly with pure, fresh drugs, and by a registered licensed pharmacist.

—TRADE AT—

J. P. CANNON & SONS

WHERE QUALITY COUNTS

MCKENZIE, - TENNESSEE

N. B.—Remember, that it makes no difference what doctor writes your prescription or what druggist's name appears on the blank, we can fill it and fill it correctly.

Mr. Turner Cannon, a member of the firm, informs us that they ran this ad. with good results. Druggists who are looking for a good prescription ad. will find the announcement suggestive.

Getting Business from Vacationists.—

During the summer months there is an exodus of people to the summer resorts and sales are very apt to fall off unless an effort is made to sustain them. Hynson, Westcott & Co., of Baltimore, send a little folder to their customers soliciting business by mail during the summer. It is a very good idea, for city folks are very apt to go away in the hot season.

Information is given for the transmission of orders by telephone, mail, or wire. The folder tells how to obtain refills and describes the various expedients that simplify the purchase of drugs from distant points. A calendar for the summer months is also included. The paper is a somewhat heavy tan stock, the dimensions being 3½ by 5½ inches. The text is printed in blue surrounded by a gold border.

A "Reason Why" Ad.—

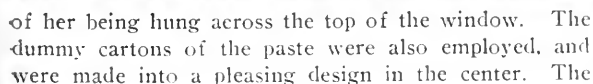
William M. Higham, of New Bedford, Mass., ran a three-column ad. in one of the local dailies. It is reproduced in the accompanying etching, greatly reduced in size. We have been asked to criticize it, but have no particular criticism to offer. We might possibly suggest a different arrangement of the text. The foot-

tooth-paste itself was spread about on the floor of the window, the tubes being taken out of the cartons in many instances.

It seems the Commercial Club of Sheldon, Illinois, gave away an \$1800 automobile recently. Just what the conditions of the award were we do not know. But the merchants certainly made the most of the occasion to attract people to the town and boom business. Mr. Humma, the druggist, was there to welcome his

ning. Otherwise the ad, is a good one. There is plenty of white space, and the border is conspicuous enough to attract the reader's attention to the ad. "Get it at Higham's" is a good catch phrase to play upon.

John Von Rohr, of Winona, Minnesota, recently had this display of Euthymol Tooth Paste in his window. The Euthymol Girl was used to good advantage—eight



friends. He used large bill-board posters, 20 by 28 inches in dimensions, to welcome visitors to his store. A reproduction of the poster is seen in the accompanying etching.

It is rather unusual for a retail druggist to distribute a catalogue for the purpose of developing a mail-order business. But several proprietors are doing that successfully. W. J. Frazier, of Wichita, Kansas, sends out a substantial sort of a book to people in the surrounding territory. People are asked to order goods with the understanding that they may be returned if not satisfactory. First-aid supplies, household specialties, and sundries are quoted.

The paper is a heavy white stock, far superior to the cheap kind used by the large mail-order houses. The half-tones are distinct, and last but not most important of all, the reading matter describes the material offered in a clear but comprehensive way, giving the reader a good idea of the articles on sale.

Mr. Frazier's catalogue is six by nine inches. The cover is red, bearing in gold letters the title: "Frazier's Handy Home Book," and in justification of this title the book contains much practical information which would cause recipients to preserve it. The whole idea is very commendable and speaks well for the enterprise of the Frazier Drug Co.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Fresh Facts.—

Ferric hydroxide is said to be soluble in white of egg in absence of air, and a new preparation of iron based on this fact is being exploited.

It is now thought very probable that all the elements may exist in allotropic forms. Probably every element has a stable and an unstable form, under definite conditions.

It is calculated that one atom of radium emanation will decompose 154,000 molecules of water.

An Italian chemist says that one of the functions of volatile oils in plants is to increase the flow of sap and make the tissues more permeable to the sap.

Strychnine hinders bacterial ferments in 0.2-per-cent solution, but it requires a 1-per-cent solution to materially hinder the growth of many of the pathogenic germs.

Synthetic rubber has not yet proved a commercial success, but is likely to some day. It will probably not replace natural rubber, but will fill a field of its own.

A German investigator says that it will soon be possible to locate underground water in dry countries by the reflection of electric waves. Telegraphing for it through the earth, so to speak.

"Canadium" is the newest element in point of discovery. It was discovered in British Columbia, and is a white, lustrous metal of the platinum group, softer than platinum.

Mercury salts in solution in water have the property of dissolving considerable quantities of silver chloride, or of preventing the precipitation of silver as chloride.

Cranberries contain benzoic acid, spinach contains arsenic, potatoes contain solanine, cherries contain prussic acid, and peas and beans contain toxalbumins.

Growing plants form starch and sugar by absorption of formaldehyde, but the formaldehyde must be in highly dilute form or it will act as a poison to the plant.

Trimethylamine is said to be a normal constituent of the blood and of the cerebrospinal fluid. And trypsin has been identified as one of the constituents of tears.

Catine, the active principle of *catha edulis*, has an effect on the nervous system similar to cocaine, and on the heart similar to caffeine. It also possesses stimulant effects aside from its heart influence.

External applications of guaiacol—about 10 minims per application—are said to reduce the temperature in typhoid fever.

Ammonium chloride, in 30- to 60-grain doses, is stated to be an antidote to alcoholism, preventing drunkenness, or sobering the individual, and warding off delirium tremens.

Cinnamon water made by distillation from cinnamon bark develops a benzol odor on long standing, according to J. Tait, Ph.C.

By means of liquid helium a temperature of 2° above the absolute zero, or -271° C., has been attained. Probably the absolute zero is impossible of actual attainment.

The New Analysis.—

J. J. Thomson has devised a new method of chemical analysis which is so sensitive that one-six-thousandth of a grain of substance can not only be detected, but its atomic or molecular condition can be determined, and its atomic weight can be ascertained without the necessity of purification. The method consists in exposing the substance to positive rays and to an electric and magnetic focus, then photographing by a special process and studying the lines on the photograph. It is claimed to be more sensitive than the spectroscope.

Modern Farming.—

Gloede has made some interesting experiments on the influence of electricity in the soil on the growth of plants. Wires were run through the ground, carrying currents of high-tension electricity, so that an electric field is created in the soil in which the plants were grown. Chrysanthemums, roses, and carnations grew more rapidly, were freer from plant disease, and produced twice to four times as many blossoms as control plants grown in normal soil. Fruits and vegetables also grew larger, more rapidly, and retained their flavor while producing larger crops. In some instances the flavors were improved.

All Metals Therapeutically Alike.—

Colloidal solutions (or suspensions) of metallic gold, silver, mercury, platinum, etc., are being tried in medicine, and with some success in infectious diseases. They have been used in pneumonia, meningitis, pleurisy, peritonitis, septicemia, etc., both for local and for constitutional effects. A curious phase of the actions is that all these metals produce about the same effect and in about the same degree, which suggests that the physical properties of the metals are the important thing in medicine.

A Good Mikztrz-Diaztaz.—

A Russian chemist, "Chazakcz," concludes from fractional precipitation experiments that diastase is a mixed enzyme, and consists of at least two different substances, a liquefying enzyme and a saccharifying enzyme. He also thinks that the saccharifying enzyme is a complex body, since the different fractions obtained from it differ widely in their properties.

Solvent for Alkaloids.—

Alkaloids are much more soluble in boric-acid-glycerin than in water, and a solvent composed of 3 Gm. boric acid, 50 Gm. glycerin, and water to make 100 Cc. is proposed as a general solvent. The solvent action is increased with proportion of boric acid. Morphine is soluble to the extent of 5.5 per cent in this solution, or 50 times as soluble as in water.

Phosphorus Light.—

A German chemist claims that the human body cannot absorb phosphates, but that these act as irritants and are eliminated. Hypophosphates are partially absorbed, but as a means of supplying phosphorus they are valueless. He says that all the inorganic "nutrient salts" are valueless for building up the body, but may be of use as irritants.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Root Beer Extract.

E. H. L. & Co.—The following preparation makes a root beer "extract" which may be mixed with syrup; or it may be diluted with nine gallons of water containing one gallon of refined molasses, and charged in a fountain:

Fluidextract of sarsaparilla.....	10 fluidrachms.
Fluidextract of pipsissewa.....	10 fluidrachms.
Fluidextract of licorice.....	4 fluidrachms.
Fluidextract of wintergreen.....	4 fluidrachms.
Oil of wintergreen.....	48 drops.
Oil of sassafras.....	24 drops.
Oil of cloves.....	12 drops.
Alcohol	10 fluidounces.

If it is preferred to use a fermented article, add the water and molasses, using warm water, also one quart of yeast, and keep the mixture in a warm place until fermentation is complete.

This product may be put up in bottles if desired.

Here is a second formula:

Percolate the following with a menstruum of 3 volumes of alcohol to 5 volumes of water until exhausted:

Sassafras	1 ounce.
Yellow dock	1 ounce.
Wild cherry bark.....	½ ounce.
Allspice	1 ounce.
Wintergreen	1 ounce.
Hops	¼ ounce.
Coriander seed	½ ounce.

To the percolate add 1 pint of yeast and sufficient water to make 6 gallons, and allow to ferment in a warm place. Or a fluidextract of the above can be made of ½ the strength of the drug, and 2 ounces of the extract used for preparing a gallon of beer.

Cottonseed Oil versus Lard.

W. F. G. writes: "Some time ago I read an article on the superiority of cottonseed oil over lard for cooking purposes. I would like very much to receive from some good authority further information regarding the food value of cottonseed oil. If you could publish such an article in your next issue you would greatly oblige me."

In a book entitled "Foods and Their Adulterations," by Dr. H. W. Wiley, we find a paragraph that answers your question in a general way. We quote:

Among the fats which are used for adulterating lard may be mentioned beef fat and cottonseed oil. A mixture of beef fat and cottonseed oil may be made, having approximately the same melting point as lard itself. Instead of using the whole cottonseed oil for the purpose, it may be previously chilled and its product of a higher melting point, or as it is sometimes called, the stearin of cottonseed oil, may be used with admixture of lard. Large quantities of these mixed fats were formerly made in this country under the name of "compound lard" in which the above adulterants were the chief constituents. The laws of the various States are happily of a character which forbids the sale of a mixture of a compound of lard and other fats under the name of lard, although there is no objection to such admixture from a hygienic and dietetic point of view. There are many hygienists who are of the opinion that the more extended use of vegetable oils instead of lard would be of value to the health of the public. If this be true, the admixture of a vegetable oil with lard would improve it from a hygienic standpoint. The principal, perhaps the sole, objection to such admix-

tures is their fraudulent character. Vegetable oils, especially cottonseed oil, being very much cheaper than lard, their use in lard without notification cheapens the product and defrauds the customer.

For more specific information on the food value of cottonseed oil, write the Department of Agriculture, Washington, D. C.

Several Questions.

O. D. asks: "How would you mix benzine and iodine together so that it would make a nice looking solution? Has the solution any special name? What will take silver nitrate stains off of one's hands? What is Boulton's Solution?"

To mix benzine and iodine together, shake them up in a bottle. We do not know the solubility of the metal in this solvent, but you can find out by a little experimenting. We know of no special name that is applied to this solution.

Here is a formula for removing silver nitrate stains from the hands. It is borrowed from "350 Dollar Ideas for Druggists." Dissolve ½ ounce of potassium cyanide in 2 ounces of water and apply to the stains. With a very little rubbing they will disappear. After applying the solution, the hands should be washed in running water, as potassium cyanide is very poisonous.

Boulton's solution is a mixture of 110 minims of compound solution of iodine, 40 minims of liquefied carbonic acid, 2½ fluidounces of glycerin, and enough water to make 16 fluidounces.

"Banana Oil."

T. W. M. writes: "Will you kindly give me a formula for bronzing liquid, the so-called 'Banana Oil,' and also advise me whether it is used for any other purpose?"

The so-called "banana solution" (the name being derived from its odor), which is used in applying bronzes of various kinds, is usually a mixture of equal parts of amyl acetate and benzine, with just enough pyroxylin dissolved therein to give it sufficient body. Powdered bronze is put into a bottle containing this mixture, and the paint so formed is applied with a brush to the article to be bronzed. The thin covering of pyroxylin that is left after the evaporation of the liquids protects the paint from the air and keeps it from being wiped off by the cleanly housemaid. Tarnished picture frames and tarnished chandeliers to which a gold bronze has been applied from such a solution will look fresh and new for a long time.

As far as we know, banana oil is not used for any other purpose.

What Does He Mean?

"Pharmacist" writes as follows: "Would you please let me know through the columns of your journal what should be dispensed when a prescription for 'C. C. T.—P. D. & Co.' is prescribed?"

"C. C. T." is the customary abbreviation for chocolate-coated tablets, and evidently the prescriber had in mind some particular tablet made by Parke, Davis & Co. He probably intended either to give the number of the tablet or to write out in full the name of it, but forgot to do so in his haste. This explanation, however, is so patent on the surface that we are somewhat at a loss to know why "Pharmacist" puts the question to us.

Sewing Machine Oil.

G. G. G. writes: "Could you publish a formula for an excellent non-gumming sewing machine oil that compares favorably both in quality and price with the standard sort sold in the market?"

Petroleum oils are better adapted for the lubrication of sewing machines than any of the animal oils. Sperm oil has for a long time been considered the standard oil for this purpose, but it is really not well adapted to the conditions to which a sewing machine is subjected. If the machine were operated constantly or regularly every day, probably sperm oil could not be improved on. The difficulty is, however, that a family sewing machine will frequently be allowed to stand untouched for weeks at a time, and will then be expected to run as smoothly as though just oiled. Under this kind of treatment almost any oil other than petroleum oil will become gummy. What is known in the trade as neutral oil, of high viscosity, would probably answer better for this purpose than anything else. A mixture of 1 part petrolatum and 7 parts paraffin oil has also been recommended.

Complying with the Food and Drugs Act.

O. B. submits the following queries:

1. "In order to comply with the Food and Drugs Act, is it necessary to mention on the label whether preparations contain hyoscyamus, nux vomica, and Adrenalin Chloride?"

2. "Should a headache powder which is colored with carmine merely to distinguish it from other powders bear a statement to that effect in order to comply with the law?"

To the first question, we answer no. Alcohol, morphine, opium, cocaine, heroin, eucaine, chloroform, cannabis indica, chloral hydrate, acetanilide, and their derivatives are the drugs which must be mentioned. The food and drugs act does not include hyoscyamus, nux vomica, or adrenalin in the list.

The provision governing the use of coloring agents in food does not apply to drugs. There is no prohibition against using an innocuous coloring material in a pharmaceutical preparation. Nor is it required to mention it on the label.

Sulphates Insoluble in Alcohol.

O. D. has been having trouble with a prescription. He writes: "Please let me know what is the trouble with this mixture. I cannot make it up so it will look well."

Magnesium sulphate 50 grammes.
Tincture of nux vomica 10 Cc.
Oil of peppermint06 Cc.
Tincture of gentian compound 200 Cc.

The trouble is due to insolubility of the magnesium sulphate in the large amount of alcohol contained in the tinctures. Sulphates as a class are practically insoluble in alcohol. The doctor should be advised to change his laxative or give it separately. Or enough water should be added to double the original volume. Then twice the original dose must be taken.

Denatured Alcohol in a Shampoo.

H. C. De B.—Yes, it certainly would be harmful to use denatured alcohol in seafoam shampoos. Ordinary commercial denatured alcohol contains methyl alcohol

as a denaturant, and methyl alcohol has been found to be toxic even when used in external preparations. It has no place whatever in medicine. It affects the optic nerve unfavorably, and has even caused blindness. It would seem especially unwise to use it in shampoos, for some of the product might accidentally get into the eyes. The New York City Board of Health has recently passed an ordinance forbidding the use of methyl alcohol in medicaments of any kind. We believe there are two or three State laws of this character, and it is our impression also that there is some governmental ruling or regulation, based on the food and drugs act, and declaring that methyl alcohol will be considered illegal when employed in any medication.

A Deodorant and Disinfectant for Theaters.

C. J. W. writes: "I have a great many calls from the owners of moving picture shows for a solution to be sprayed through the house for a perfume and disinfectant. Can you suggest a formula for the purpose?"

There is no doubt that moving picture show houses are in need of disinfection. A little fresh air might help. But it is evident from your query that primarily you want a deodorizer rather than a disinfectant or perfume. Some of the aromatic oils related to turpentine have a certain amount of germicidal and insecticidal value. They also have a pleasant odor and to a certain extent deodorizing properties. We have in mind the oils obtained in the distillation of pine wood. The Atlantic Turpentine and Refining Co. of New York sell them. Make an emulsion of the oil with saponified rosin somewhat after the process of compound cresol solution, U. S. P. Then it will mix with water. Use a one- or two-per-cent aqueous emulsion for a spray. A perfume may be added if desired.

Pain Expellers.

I. R.—We do not know the composition of the proprietary preparation which you mention. But the following formula is said to be typical of the so-called pain-expellers or pain-dispellers:

Aromatic spirit of ammonia 1 fluidounce.
Compound spirit of ether 1 fluidounce.
Spirit of peppermint 1 fluidounce.
Compound tincture of lavender 1 fluidounce.
Spirit of camphor 1 fluidounce.
Tincture of capsicum 1 fluidounce.
Tincture of opium 1 fluidounce.
Tincture of rhubarb 1 fluidounce.
Alcohol 3 fluidounces.
Water, enough to make 16 fluidounces.

Apply externally for sprains, bruises, sores and rheumatism, and for all other purposes for which liniments are used. Internally pain-expellers are employed for the cure or relief of colic, diarrhea, etc.

As for the right to call the preparation "Pain Expeller," we see no objection to your using that name. We do not think it would be considered misbranding under the food and drug laws. To call it a "Pain Cure" might get you in trouble.

Business Accounting.

E. E. W.—We assume that you already have a system for keeping customers' accounts, and that what you want is a method for keeping track of business records, so as to show your sales, your purchases, your expenses,

your profits, and the like. A system of this kind was described in an address delivered last year by the editor of this journal before the Nebraska Pharmaceutical Association, and printed on page 498 of the BULLETIN OF PHARMACY for December, 1911. Other systems of a similar character were described with some detail in an article published in the BULLETIN for March, 1907. You doubtless have both of these journals in your files, but if not the publisher will be able to furnish them at the customary price of ten cents apiece.

A Bad Mixture.

W. H. B. writes us as follows: "Could you please suggest through your columns a way to mix the following ingredients to make a thick liquid that will not separate:

Mercury,
Nitric acid,
Oil of cedar,
Tincture of cantharides, equal parts.

"The veterinarian said he had tried to compound this formula by dissolving the mercury in the acid and adding the oil and tincture. But the oil would separate, and the mixture was too thin. He says it can be mixed so that it is a thick, even liquid."

We have tried to compound the mixture in various ways to no avail. We have even added other substances, but the result was unsatisfactory. Emulsifying with acacia and enough tragacanth to thicken and using water to form the primary emulsion gives the best result, but we would not commend it.

Polishing Brass.

C. D. Co. wants a formula of a good brass polish that may be used to polish automobile lamps and the like. The *Wiener Seifensieder-Zeitung* publishes the following formulas for brass polishes:

(1) Rub the metal with rottenstone and sweet oil, then rub off with a piece of cotton flannel, and polish with soft leather. A solution of oxalic acid, rubbed over tarnished brass, soon removes the tarnish, rendering the metal bright. The acid must be washed off with water and the brass rubbed with whiting and soft leather.

(2) Three parts of oxalic acid are dissolved in 40 parts of hot water; add 100 parts of powdered pumice stone, 2 parts of oil of turpentine, 12 parts of soft soap, and 12 parts of a fat oil.

(3) Rottenstone, 7 ounces; powdered oxalic acid, 1 ounce. Both are used with a little water.

(4) Rottenstone, made into a paste with sweet oil.

(5) Rottenstone, 4 ounces; oxalic acid, in fine powder, 1 ounce; sweet oil, 1½ ounces; turpentine, enough to make a paste.

Palatable Castor Oil, Red.

C. R. asks how to make palatable castor oil and how to color it red. In a paper read before the New Jersey Pharmaceutical Association some years ago Prof. P. E. Hommel described the various modes of administering castor oil to make it palatable. After considerable experimentation he had found that the following formula yielded a preparation which was about all that could be desired as a palatable and transparent product:

Castor oil.....4 ounces.
Saccharin1 grain.
Oil of anise.....8 drops.
Alcohol1 drachm.

Dissolve the saccharin in the alcohol by the aid of gentle heat, and add the oil of anise; then agitate this mixture well with the castor oil. To color red use an oil-red soluble obtained from any of the dye houses.

Innumerable other formulas have appeared in the

BULLETIN from time to time. See the annual indexes in the December issues.

Sweeping Compounds.

A. L. B.—According to a patent issued in 1905, a sweeping compound is composed of sawdust, silicious material, rosin, oil, and tar. Another patent calls for catechu, 1 part; mineral oil, 8 parts; sawdust, 16 parts; bran, 32 parts; sand, 48 parts; and water containing a small amount of nitrobenzene, 32 parts.

This is offered as a good formula:

Paraffin wax1 ounce av.
Paraffin oil2 pints.
Salt4 ounces av.
Sea sand5 pounds.
Sawdust5 pounds.
Oil of eucalyptus.....1 fluidounce.

Melt the wax, add the paraffin oil, incorporate the sand, salt, and sawdust, and finally add the oil of eucalyptus.

A Permanent Beef, Iron and Wine.

H. W. writes: "Please publish the formula for a beef, iron and wine that does not precipitate on standing. My formula or the one in the National Formulary throws down sufficient precipitate to make the product turbid."

Beef, iron and wine is likely to precipitate in the cold. And when the precipitate is redissolved by the application of heat, the solution does not become clear again. We can only suggest that the preparation be aged for three or four weeks. Then filter it. If you still have trouble with the solution, chill it and filter in the cold.

Elixir of Iron, Quinine, Strychnine and Pepsin.

R. I. wants a formula for elixir iron, quinine, strychnine and pepsin.

Follow the formula for elixir of iron, quinine and strychnine given on page 25 of the National Formulary, adding scale pepsin to complete the mixture. It is necessary, however, to make one departure from that process. You must first dissolve the pepsin in the elixir before adding the tincture of citrochloride of iron. Use 8 grains of scale pepsin to the fluid-ounce.



AT THE MISSOURI STATE MEETING.—Dr. and Mrs. Henry M. Whelpley and Mr. and Mrs. Mittelbach will at once be recognized in this picture. It was taken at the 1912 meeting of the Missouri State Pharmaceutical Association. Dr. Whelpley has been permanent secretary of the organization for 20 years, while Mr. Mittelbach has been treasurer since 1896.

An Incompatible Prescription.

R. I. submits the following prescription for our comments:

Protoiodide of mercury.....8 grains.
Potassium iodide2 drachms.
Potassium bromide3 drachms.

Mix and make capsules.

The querist says: "While we dispensed the prescription, it did not look good to us. The whole mixture turned dark-gray and slightly damp."

There is probably a certain amount of reaction between the mercurous iodide and the potassium iodide, forming mercuric iodide and mercury. The bromide acts similarly.

A Remedy for Seasickness.

G. L. I. writes: "I should like very much to obtain a formula for seasickness. Being located in a harbor town, we have frequent calls for such a remedy."

Chloretone in 5-grain capsules has been recommended. One susceptible to seasickness can take a capsule on embarking, and another on going to bed. This is by way of a preventive. During an attack let the patient take a 5- or a 7-grain capsule of Chloretone. It is said to relieve the trouble speedily.

Syrup of Ginger Ale.

L. A. B. asks us to furnish him with a formula for making a syrup of ginger ale, to be used at a soda fountain like any other flavor such as vanilla or chocolate, etc.

The Spatula Soda Water Guide gives the following formula for ginger-ale syrup:

Ginger ale extract.....4 ounces.
Acid1 ounce.
Caramel, very light.
Lemon syrup, to make.....1 gallon.

Dry Fire Extinguishers.

J. H. M.—The following formulas are reprinted from a previous issue of the BULLETIN:

- (1) Common salt8 parts.
Sodium bicarbonate6 parts.
Sodium sulphate2 parts.
Calcium chloride2 parts.
Sodium silicate2 parts.
- (2) Common salt60 parts.
Sal ammoniac60 parts.
Sodium bicarbonate80 parts.
- (3) Sal ammoniac100 parts.
Sodium sulphate60 parts.
Sodium bicarbonate40 parts.

Wart Remedies.

L. L.—We are not acquainted with a wart remedy of the kind you describe. The safest and best escharotic for the removal of warts is glacial acetic acid applied morning, noon, and night with a camel's-hair pencil. Just touch the wart with the acid: do not saturate. Should soreness result, drop the application for two days, then resume. "Wart Solvent" is aromatic vinegar colored with Bismarck brown. Salicylic collodion is preferred by some, and a formula for it will be found in the National Formulary.

Trade-mark and Serial Number.

O. B. submits the following queries: "Can an individual (not an association or corporation) obtain registration of a trade-mark? Is it necessary that this trade-mark be in use upon articles of commerce prior

to time of application for registration? Where shall I write in order to procure a serial number for guaranteeing articles under food and drugs act?"

To the first two queries, our answer is in the affirmative, yes. To procure a serial number write the Secretary of Agriculture, Washington, D. C.

Washing Powders.

A. L. B.—We do not know the composition of the proprietary products which you mention. Perhaps the following formulas will prove satisfactory for a washing powder:

- (1) Sodium carbonate12 ounces av.
Powdered soap2 ounces av.
Powdered borax2 ounces av.
- (2) Sal soda, partially effervescent.....6 parts.
Soda ash1 part.
Yellow soap in coarse powder.....1 part.

Foot Powder.

L. L.—Salicylated powder of talc, N. F., is an excellent foot powder, of the following composition:

Salicylic acid1 ounce av.
Boric acid3½ ounces av.
Talcum29 ounces av.

Reduce all to fine powder, mix well, and pass through a fine sieve.

Salicylated powder with talc of the German Pharmacopœia is like the preceding, but contains wheat starch instead of boric acid.

Face Powder in the Form of a Paste.

W. G. L. wants the formula of a face powder presented in the form of a paste.

Here is a typical formula:

Prepared chalk8 ounces.
Flake white6 ounces.
Zinc oxide1 ounce.
Glycerin3 ounces.
Bay rum4 ounces.
Carmine solution, sufficient.

A Concentrated Laxative Cough Preparation.

J. W. L.—We do not know the composition of the proprietary cough preparation you mention. But if you want a formula for a concentrated laxative cough remedy, you might try concentrated fluid white pine compound for making the syrup. Add a little fluidextract of senna to make it laxative. The fluid could be diluted with simple syrup.

A Dustless Mop.

H. W. requests us to publish a method of making what he calls a chemical mop.

The so-called dustless mop is made by saturating an ordinary dry mop in petrolatum oil. It is then wrung out to remove the excess oil.

Corn Collodion.

L. L. writes: "Can you give me a formula for an iodine corn cure?"

Suppose you follow the N. F. formula for corn collodion, adding to it tincture of iodine sufficient to impart 3 per cent of metallic iodine to the compound. Try it.

Sambucus Ebulus.

J. S. asks: "What is *Sambucus Ebulus*?"

Sambucus Ebulus is a European elder. It is used as a drastic purgative.

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THE MONTH'S HISTORY

THE PRICE OF GROWTH.

This issue of the BULLETIN is unfortunately a little late. The delay has been caused by our desire to present adequate reviews of the two great conventions of the year—the N. A. R. D. in Milwaukee and the A. Ph. A. in Denver. A staff correspondent attended both meetings, and his summaries appear elsewhere.

In the meantime the various State organizations continue to hold their annual gatherings from week to week, and altogether there has recently been a good deal of association activity. We observe that the question of membership keeps cropping up. Apparently the only way to develop a big membership, and to keep it big, is by means of traveling organizers. Out in Iowa, as we reported last month, the membership of the State Association has

been increased from 400 to 1200 through a county organization system, supplemented by the earnest efforts of a paid organizer (a woman, by the way) whose whole time has been devoted to the task for a year or more. Two or three other State associations have practiced the same methods with success.

Such work, however, must apparently be kept up indefatigably. In Ohio, for instance, where the membership had grown in 1911 up to the surprising figure of 1481, interest began to slump as soon as the organizer resigned from his task, and at the recent annual meeting it was found that reports from the county organizations were far too infrequent in number and much too indifferent in character. The last organization campaign cost \$1786, and only brought in \$1522, but even at that it was to be considered a success since it added greatly to the strength of the body. It appeared from reports read at the N. A. R. D. convention in Milwaukee that organization work is very expensive, and that it costs from 50 to 100 per cent to collect dues! This scarcely seems worth while, and yet we feel perfectly certain that if the N. A. R. D. organizers or dues-solicitors were to be removed from duty the membership would slump alarmingly. Even as it is, it has gone down during the last four years from 16,519 to 7967. The continued work of paid organizers, both for the N. A. R. D. and for the State associations, seems essential and necessary if anything like a representative membership is to be secured and held.

Unless an association has a really representative membership, it largely loses the influence and force which it needs especially in legislative matters, and efforts to keep up growth and increase are therefore worth all they cost.

* * *

LEGISLATIVE QUESTIONS.

Legislative matters have occupied a conspicuous place in the foreground at most of the recent meetings, State and National. Elsewhere in the present issue of the BULLETIN

we are printing the address of John C. Wallace, delivered at the Denver meeting last month as chairman of the Section on Education and Legislation of the A. Ph. A. Among other things, Mr. Wallace expresses the opinion that there should be a national law providing for the keeping of records of sales of narcotics sent into interstate commerce. This has been a moot question now for a couple of years or so. Such a provision has been introduced in two or three congressional measures, and now appears, we believe, in one of the group of Harrison bills recently introduced into Congress.

We disagree with Mr. Wallace absolutely. We have often expressed the opinion editorially that to keep records of such sales would involve an enormous and entirely needless amount of inconvenience, and we are glad to see at last that the N. A. R. D. agrees with us. The N. A. R. D. Committee on Legislation, in its report rendered at the Milwaukee convention last month, declared against the record feature of any national law. As a matter of fact, very few people realize what this will mean. There are literally thousands and thousands of pills, tablets, and other products of which records would have to be kept. Every manufacturer and jobber would require a staff of extra clerks for the purpose, and the department in Washington would require an army of them. The expense on the government alone would be very great, and all this work would be done for the State governments, since it is proposed to have the facts covered every month to State officials in order to provide them with means of enforcing the State laws.

Is there any necessity for subjecting manufacturers, jobbers, and even retailers to such a gigantic amount of annoyance, inconvenience, and trouble of a thousand kinds? Is any government department going to welcome so much extra work? Will the Federal government subject itself to all this expense and detail merely to help the State governments do their work? More than all this, will the game be worth the candle? Is it going to be of any substantial help in the enforcement of anti-narcotic laws—in the curtailment and correction of the narcotic evil? We certainly do not think so, and we believe the whole proposition is foolish from start to finish.

THE "SINGLE STANDARD."

We find Mr. Wallace also expressing himself in favor of what he calls "the single standard" for U. S. P. and N. F. products. He gives a list of a few States which impose the single standard, and of others which have differing requirements. We disagree with Mr. Wallace in this respect also. We have often argued that the so-called "variation clause" in the Federal act is both wise and necessary, and is furthermore essential to the constitutionality of the law. If we do not permit changes and improvements to be made in official products, we are going to hold back all progress until a new edition of the U. S. P. happens to be published.

It is sometimes argued, however, that the variation clause permits the sale of preparations of inferior strength. The reply to this is that the clause provides that the actual strength must be stated on the label. Is not the buyer therefore protected? In some States, as Mr. Wallace points out, the variation clause in the Federal act has been duplicated except that sub-standard preparations may not be sold, like opium products or certain flavoring essences used generally by the public. These are wise concessions, but if the variation clause as a whole is thrown overboard, either in national or State legislation, much harm will be done to the advancement of scientific medicine, and the constitutionality of such legislation will be imperiled.

As a matter of fact, however, this whole argument is now more or less beside the question. It was argued very strenuously all winter with reference to the Richardson bill, which certainly stirred up a lot of strife and dispute. The Richardson bill, though, has been side-tracked by the Committee on Interstate Commerce in the House of Representatives, and we shall not hear of it again until next year if we do then. Much was said about this bill in the report last month of the N. A. R. D. Committee on Legislation, but the bill had not then been killed as it was shortly afterwards. The Richardson measure tried to do too much. It started out originally to bring false therapeutic claims within the scope of the Federal act, but it went much farther and attempted a lot of reforms concerning which no two people or interests could find agreement. It originally proposed to strike out the variation clause

in the food and drugs act, and it also proposed many other changes—but this is now ancient history. We shall have to forget it.

* * *

THE SHERLEY BILL PASSED.

Congress, indeed, has done exactly what we predicted several months ago it would do. It has passed the Sherley bill as a substitute for the Richardson measure and the numerous brood of affiliated drafts. What is the Sherley bill? It is a very simple measure, merely adding a few words to Section 8 of the food and drugs act, and so amending it that hereafter an article shall be deemed to be misbranded "if its package or label shall bear any statement, design, or device regarding the curative or therapeutic effect of such article which is false and fraudulent." This is now a part of the law.

The purpose of this amendment is perfectly clear. When the Johnson Cancer Cure case was decided by the Supreme Court, it was suddenly discovered that the misbranding clause of the food and drugs act did not cover the question of curative claims. The act was held to touch only on statements regarding the purity and identity of the *ingredients* of an article. Hundreds of prosecutions therefore had to stop in which the government was trying to outlaw various "cures" and other remedies concerning which exaggerated therapeutic claims had been made. This omission is now corrected by the Sherley amendment. For the first time the act unquestionably penalizes curative claims which are both false and fraudulent in character.

As we have said, this is what the Richardson bill originally sought to do. It was the decision in the Johnson case which started all this agitation for further amendments of the act—and the agitation is now crystallized in the passage of the Sherley measure. Nothing else was attempted by Congress during the recent session.

* * *

WHO SHOULD ENFORCE THE LAWS?

One of the interesting features of Mr. Wallace's address, to which we have made several references in the foregoing paragraphs, is that in which he shows to whom in the several States the enforcement of the various pure drug acts is entrusted. Mr. Wal-

lace himself believes, and here we agree with him perfectly, that all pharmacy and pure drug laws should be enforced by representatives of pharmacy. Unfortunately, however, while all pharmacy acts are so enforced, only a few of the pure drug laws come in the same category. It will be seen by consulting Mr. Wallace's address that the enforcement of the various laws has been placed in the hands of all sorts of State officials, commissions, and special bodies. Something like uniformity ought to be wrought out of all this chaos.

We are very much pleased to find that at the meeting of the Ohio State Association in July, S. E. Strode, the Dairy and Food Commissioner of that State, put himself vigorously on record by recommending that drugs be separated from foods in the administration of the State food and drug law, and that the former be placed in the hands of a special drug commission. Mr. Strode's position apparently seemed to be, although he did not say so definitely, that such an office as his was scarcely qualified to handle the enforcement of a pure drug law, that it should limit itself to the administration of food and dairy measures, and that drug legislation should be enforced by experts who know the subject thoroughly. Should such a separation be made, he thought it would also solve the problem of the enforcement of the poison laws, and make the whole administration of drug and pharmacy legislation more efficient.

If other officials throughout the country should take so frank and outspoken a position as Mr. Strode, it would help to place the administration of pure drug laws where they belong—either in the hands of the board of pharmacy or, perhaps better yet, a special drug commission or other body in which pharmacists were properly represented.

* * *

SOME RADICAL VIEWS.

While speaking of the Ohio Pharmaceutical Association, we may confess to a good deal of interest in the presidential address of Azor Thurston. This officer evidently has ideas of his own about a whole lot of things. He thought, for instance, that the practice of receiving reports from druggists' insurance companies, and then giving them valuable space afterwards in the proceedings, was indefensible. These companies, he said, repre-

sented private enterprise, should not be given free advertising, and should be made to pay for what space they occupied in the proceedings. President Thurston also took a fall out of the practice of paying the expenses of delegates to N. A. R. D. meetings. Why not pay those men also who go to the A. Ph. A. convention, the American Chemical Society, or to the various State gatherings? Why this discrimination? To his way of thinking it was a "most uncalled for expenditure."

Mr. Thurston paid his respects to physicians. He thought the State drug inspectors should have authority to examine the stocks of dispensing doctors as they do those in drug stores, and that the law should make it compulsory to have registered pharmacists in charge of such dispensaries.

* * *

THE VENEREAL QUESTION.

An interesting feature of the Ohio State meeting was the delivery of an address by Julius M. Rogoff, Ph.G., M.D. It will be seen from Dr. Rogoff's degrees that he is a graduate pharmacist as well as a graduate physician. By reason of his dual training and interest he was asked to read a paper on medico-pharmaceutical ethics. He went over the whole field of differences between the two callings, and what he said on one subject we feel moved to quote:

A most dishonest practice among druggists is the treatment of venereal diseases. These diseases have resisted the combat against them for ages, and are still partly unconquered by the most recent valuable developments in medical progress; these dreaded venereal diseases, which are the curse of society, we find druggists are dishonest enough to attempt to treat, and, I must say, with disastrous results. I may mention in connection with this topic the fact that a supposedly ethical manufacturing pharmaceutical firm is guilty of this malpractice by placing in their line which they furnish to druggists a preparation for treating these venereal diseases, for indeed, I have seen as many cases of venereal complications resulting from the use of their combination as I have from any other misguided treatment.

There is no doubt at all that Dr. Rogoff is entirely right and sound. We have often expressed our opinion that no druggist should either make or sell any venereal remedy except on the prescription of a physician. Whatever may be thought about counter-prescribing in its general aspects, there is no room for difference of opinion under this head.

"NO FINANCIAL EXPECTORATION!"

We wonder if our pharmaceutical friends in Greater New York will see the humor in Herr Bodemann's report for the Committee on Telephones read at the Milwaukee convention of the N. A. R. D. last month? He described the telephone imbroglio of last winter in New York City, intimated that the final compromise was unsatisfactory from the druggist's point of view, and thought that the failure was easily traceable to the fact that "a trade not well organized can make no bargain, nor give promises, nor hold out inducements for promises." "New York City," he said, "had about 58 varieties of races and nationalities, who had not smelted into a typical American citizenship, with the flag 'in union there is strength' nailed to the topmast of the ship."

Mr. Bodemann thought, indeed, that "Greater New York was the smallest village in the country when it came to a solidly cemented drug trade." He remarked that when 2400 postal cards were sent out calling for a small assessment, only \$14 was secured. The postal cards themselves cost \$24, and so the committee was out \$10 instead of being in anything! He thought this effort to make the druggists of Greater New York "cough up" indicated the pitiable plight which they were in. "The cough was a dry bronchitis, with no financial expectoration!"

* * *

ANOTHER NEWS-PAPER CRUSADE.

It would appear from the newspapers that H. A. Metz & Co. and Victor Koechl & Co. have started war on druggists throughout the country who are buying contraband synthetics. Two of the products specifically mentioned in the newspaper articles are Salvarsan and Aristol. For several days in succession the New York papers had column stories on the subject, in which the statement was frequently made that druggists were little else than substitutors and adulterators. Over 500 druggists were claimed to have been "discovered," and it was stated in some of the reports that more than 100 druggists on the east side of New York alone had been caught. In Chicago it was said that out of 123 samples of Aristol purchased in different drug stores 108 were found to be substitutes. The druggists in Brooklyn particularly have resented these newspaper articles, and have declared that

pharmacists often did not know they were buying contraband or adulterated products. One of the interesting features of the investigation was the discovery of a place in Brooklyn, over a livery stable, where sophisticated synthetics were prepared, or at least where they were kept in stock for the filling of orders. The packages, however, were such close imitations that it was almost impossible to tell them from the legitimate ones.

* * *

**ANOTHER
NEW DEAN.**

T. Bernard Tanner, P. D., has been elected to succeed Dr. N. A. Dubois as dean of the Cleveland School of Pharmacy, and has already made several changes in the curriculum. An alumnus of the Philadelphia Col-



T. Bernard Tanner.

lege of Pharmacy, class of 1911, he served on the Faculty of the Cleveland School last year as Professor of Theoretical and Applied Pharmacy. Since his promotion to the deanship on June 1, he has changed the entire curriculum of the college, established a course in dispensing, one in pharmaceutical jurisprudence, and a series of special lectures in emergencies and hygiene. Prior to his graduation from the Philadelphia College, Professor Tanner spent twelve years in the retail drug business, so that he presumably knows conditions as they actually exist behind the counter. In addition to his deanship in Cleveland, he is secretary of the Northern Ohio Branch of the

A. Ph. A., and secretary also of the Medico-Pharmaceutical Section of the Academy of Medicine.

* * *

**MICHIGAN ASSOCI-
ATIONS UNITE.**

The two State associations in Michigan amalgamated last month at a joint meeting held in Muskegon. The new organization is to have the name of the older of the two preëxisting bodies—the Michigan State Pharmaceutical Association. Otherwise, however, the constitution, by-laws, and characteristics of the new organization will be more like the Michigan Retail Druggists' Association, which was formed in the western part of the State three or four years ago primarily for legislative purposes.

Among other things, the M. S. P. A. will now have a membership exclusively limited to men engaged in the retail branch of the trade, although special provision is made for making honorary members of teachers and the like. The chief object of the association will be to look out for the legislative interests of the retail druggists of the State, and it plans to have the annual gatherings more practical in nature and more devoted to every-day business problems. Many differences of opinion between the two former associations were exhibited at the Muskegon convention, but everything finally came out harmoniously, and it looks now as if the drug trade of the State would be united once more.

The officers of the new organization are as follows: President—Henry Riechel, of Grand Rapids; Vice-Presidents—F. E. Thatcher of Ravenna, and E. E. Miller of Traverse City; Secretary—Von W. Furniss, of Nashville; Treasurer—E. C. Varnum, of Jonesville.

* * *

**MR. WELLER'S
MARRIAGE.**

C. F. Weller, president of the Richardson Drug Co., Omaha, Nebraska, has been married to Mrs. Jennie A. Whittlesey, of Hartford, Conn., the ceremony taking place at the Grand Hotel in Council Bluffs. The wedding completed a romance which began on an Atlantic liner, and was nurtured in France, Germany, Italy, Egypt, India, and Japan. Mr. Weller first met his bride when she joined a party for a round-the-world tour some months ago. They were mutually attracted, and the wedding followed in due season.

EDITORIAL

THE STATE BOARDS GETTING TOGETHER.

Our State system of registration in pharmacy—and in all the other regulated professions for that matter—has occasioned a good deal of incidental inconvenience in this country. From the very first a demand has occasionally expressed itself that in some way a pharmacist who had gained registration in one State, and had been legally given the right to practice his profession, should automatically be considered registered in all other States, and should have the same right in them as in his own.

Nothing practical, however, was ever done to bring about the realization of such a dream until the National Association of Boards of Pharmacy was organized twelve or thirteen years ago in connection with the A. Ph. A. This organization has gradually grown and developed until now a majority of the State boards of pharmacy are exchanging certificates with one another under certain stipulated rulings. In some cases, however, as in New York and Pennsylvania, where the graduation prerequisite obtains, the certificates of other States cannot be accepted because they do not represent the attainment of the same standard. In other cases, too, the State pharmacy acts are of such a character as to prohibit reciprocity. Gradually, though, these differences are being brushed away, although it will always be true, and very properly so, that a State requiring graduation from a college of pharmacy cannot accept registration from other States not insisting upon this requirement.

An interesting and important result of the organization of the National Association of Boards is seen in the formation of what might be called local associations in different parts of the country. Thus in New England, for instance, the boards of pharmacy of the different States have created an organization of their own which meets regularly and which is properly officered. There is a similar group of southern boards, and another group in the middle west and northwest known as the Interstate Association of Boards of Pharmacy. Each of these sectional associations involves the membership of six or eight State boards. Meetings are held first in one State, then in another, the different boards alternating as

hosts, and a time is selected when the local board is itself holding an examination. The visitors attend the examination itself, see how the work is done, confer together over details, and afterwards have a profitable experience meeting in which the whole subject in all of its ramifications is very carefully and earnestly discussed.

The primary purpose of this movement, national and sectional, is first to bring about uniform examinations and uniform conditions of legislation so far as possible, and then of course to agree upon a system of reciprocal interchange of certificates. For reciprocity, if based upon anything else than a reasonable degree of uniformity, would be a farce and would do more harm than good. Incidentally, however, these frequent meetings between the different boards of pharmacy of the country, and their attendance upon one another's examinations, is admirable for its own sake, entirely apart from the question of reciprocity. Board members are becoming better equipped for their work; they are making a study of the science of examining; they are profiting by the experience of their fellows; they are learning to attack problems with earnestness and coöperation; and the final result is that year by year our State examinations in pharmacy are gradually improving, are slowly becoming better tests of real efficiency, and are silently responding to the demand for an evolutionary elevation in the requirements imposed upon candidates.

In Denver last month the National Association of Boards held a meeting of characteristic interest and importance, and testified once more to its marked usefulness. May the good work go on!

"INTERNATIONAL COOPERATION IN PHARMACY."

An interesting address having the foregoing title was presented to the Denver meeting of the A. Ph. A. last month by J. J. Hofman, Secretary of the "Fédération Internationale Pharmaceutique." It was sent upon invitation, and it was really an explanation of the International Fédération. Mr. Hofman declared that the object of the Fédération was the promotion of pharmacy both as a profession and as an applied science, along international channels, and he explained that the Fédération will endeavor to attain this object by:

1. Collecting data with regard to the pharmaceutical

profession in all countries, and by supplying information on scientific and practical pharmacy.

2. By promoting uniformity in the qualifications required for education and tuition.

3. By studying the laws regulating the pharmaceutical profession.

4. By giving advice and supplying data with regard to the laws relating to pharmacy.

5. By organizing international pharmaceutical congresses.

6. By filing the papers of these international congresses, arranging and working out the subjects treated there, and studying fresh subjects for treatment.

7. By making arrangements for taking part in congresses of interest to pharmacy and by collaboration with other international societies.

8. By protecting the rights of the pharmaceutical profession.

9. By opposing the sale of secret remedies and the practicing of pharmacy and sale of medicines by unqualified persons.

10. By promoting the prosperity of the national pharmaceutical societies.

11. By promoting uniformity in the form of medicines and methods of analysis.

12. By promoting international harmony regulating the drug trade.

13. By exercising its influence in the event of an international regulation of patents, brands, and trademarks.

14. By the publication of papers on subjects of interest to international pharmaceutics.

15. By doing all other things which are conducive to the attainment of the object of the *Fédération*.

Certainly this is an interesting programme to be worked out in the future in the interests of international comity. Mr. Hofman is correct in saying that its realization will be of great service to pharmacy throughout the world. Modern transportation, modern diplomacy, and modern means of a thousand kinds of bringing the world closer together have resulted in an ever-increasing coöperation between nations. This is seen in movements affecting every trade, industry, and interest. The formation of the *Fédération Internationale Pharmaceutique* is merely a part of this world-wide movement, and the work of the organization should receive general support.

OUR EXAMPLE IN CULTIVATING MEDICINAL PLANTS.

The presidential address of Sir Edward Evans to the British Pharmaceutical Conference, held in Edinburgh a few weeks ago, is of peculiar interest to Americans. Sir Edward had been in the United States not many months before, together with his son, and he had been struck with the extent to which our govern-

ment was experimenting with and fostering the cultivation of medicinal plants. Almost his entire address was devoted to this subject, and he believed that the British government should undertake similar work. A bureau or department like that existing in Washington might be created in the Board of Agriculture, while in the British colonies were all sorts of soils and climates favorable to drug cultivation. Special reference was made to such drugs as cascara, mandrake root, hydrastis, ginseng, bayberry, hamamelis, and senega.

Sir Edward's son, J. H. E. Evans, read a paper in which he developed the theme in detail. He believed that "within our own colonies we should be able to cultivate much of our vegetable *materia medica*." He thought the attention of the government should be drawn to the possibilities as being of benefit to the public generally, and also as a means of working lands and employing labor which are now unproductive.

The following are a few drugs which are cultivated more or less successfully at present: Calumba, in Ceylon; eucalyptus and patchouli, in the tropics; belladonna, in England, France, and America; coca, in the West Indies, Ceylon, and Zanzibar; kola nut, in the tropics generally; cinnamon, in Ceylon; ginger, in Japan; turmeric, in the tropics; ipecacuanha, in India and, to some extent, in Brazil; valerian in England, Germany, and Austria; manna, in Sicily; benzoin, in the Straits Settlements; opium, in the East; and many plants, such as peppermint, lavender, etc., in England. The results which have been achieved in agriculture and horticulture in a comparatively short space of time would lead one to suppose that if the same skill and work were put into the cultivation of other drugs similar benefits would follow.

As the British Empire possesses every variety of climate and situation, it is probable, said Mr. Evans, that the majority of useful substances in the *materia medica* could be produced within its limits. Spread out in various widely separated localities, the risk of shortage of supply which might result from natural causes would be greatly lessened. We have found in America that the artificial cultivation of medicinal plants has become an imperative necessity for the future, and it is interesting to see that our example is likely to be followed abroad.



Some of the A. Ph. A. Members at the Denver Meeting Last Month.



Some of the N. A. R. D. Members at the Milwaukee Convention.

MILWAUKEE MEETING OF THE N. A. R. D.

Price Protection, Propaganda, and Legislation are Prominent Issues—The Coupon Plan Indorsed—Beal Recommended as Wiley's Successor—The Association to Frame an Interstate Antinarcotic Law—The Telephone Question Considered—Freericks Presented with a Silver Service—Henry W. Merritt Elected President.

The fourteenth annual convention of the N. A. R. D. was held this year in Milwaukee. The delegates convened in the Plankinton Auditorium, a magnificent structure costing something like a half-million dollars. Given this splendid hall in which to hold the meetings, and treated on all sides with a hospitality characteristic of Milwaukee, everybody came away more than pleased with the experience.

PRICE PROTECTION PROGRESSING.

Chairman Charles H. Huhn of the Executive Committee recommended the adoption of a detailed price protection plan, the Freericks-Boehm plan, by which patent medicines would be sold at uniform prices and profits.

J. Arthur Bean, an executive committeeman in Bos-



The Milwaukee Auditorium—the handsome building where the convention was held.

ton, covered himself with glory by the way he conducted negotiations for the association with C. I. Hood & Co. of Lowell, Mass. Hood's Sarsaparilla, as a result of Mr. Bean's solicitation, will, beginning Sept. 1, be sold at \$8.00 a dozen instead of \$8.75, as heretofore. Mr. Potts remarked that this concession only goes to show that all the manufacturers must sooner or later fall into line and sell their goods on a 2, 4, and 8 basis. A resolution signed by Delegates Bean, Nixon, and Finneran was then offered to the convention as follows:

Whereas, C. I. Hood & Co., of Lowell, Mass., has seen the wisdom of conforming to the 2, 4 and 8 plan advocated by the N. A. R. D., therefore be it

Resolved, that the thanks of this association be tendered to C. I. Hood & Co. for adopting this plan, and be it further

Resolved, That we request the retail drug trade to recognize and appreciate what this firm has done in furthering similar action on the part of those firms who are still marketing overpriced preparations.

Resolved, That our Secretary be authorized to send them a copy of these resolutions.

Progress is unquestionably being made in price protection. Frank H. Freericks, special counsel for the association, has a plan whereby the manufacturers will be required to enter into an agreement with a distrib-

uting agent or wholesaler in each city where his product is sold. The latter will be required to produce a cash bond, the amount depending on the volume of business, to insure that he will act in good faith. He will also appoint sub-agents in large cities who will be responsible to him. The distributor will assume responsibility for the sale of medicine of the concern for which he is acting, and will be held accountable for all sales made at other than the authorized price. The manufacturer on his part will be asked to agree to deliver the product to none but the accredited agent.

Retiring President Shuptrine gave it as his opinion that the association now has a feasible price protection plan, one by which druggists of the country can derive a living profit on the sale of patent medicines. He advised every druggist to get a copy of the Freericks-Boehm plan and study it carefully. As we see it, continued Mr. Shuptrine, we are in accord with the law. The members of the Executive Committee, too, are agreed that Mr. Freericks has framed for the N. A. R. D. a legal-proof price protection plan. They recommend it as one involving as little detail as possible for carrying out the necessary provisions, and as a plan which they believe will legally price-protect the sale of proprietaries.

President-elect Henry W. Merritt, in his speech of acceptance, said he was in favor of price protection on a 2, 4 and 8 basis. He expressed his appreciation for the efforts of Miles and other firms who have been loyal to the retail trade. The manufacturer of an unprotected and overpriced product he did not consider a friend of the association.

AN INTERSTATE ANTI-NARCOTIC BILL.

Annoyed by the vain attempts on the part of lawyers and statesmen to draft an interstate anti-narcotic bill that is effective, but at the same time practicable, the N. A. R. D. decided to take this duty into its own hands and frame a proper bill. Mr. Hubbard of Boston felt, however, that it was a mistake for the druggist to usurp this function. He thought law-making might better be left to legislators who specialize in this work, notwithstanding the fact that Chairman Richardson of the N. A. R. D. legislative committee had recommended that the association draft an anti-narcotic law because he believed it had men who could do it. But Mr. Hubbard, who, by the way, represented the A. Ph. A. at the hearings in Washington last April, felt that legislation was dangerous ground to walk on. He felt, too, that druggists were not wise in pressing upon the government the adoption of measures that might militate against themselves.

Several speakers dissented from what Mr. Hubbard had said. Mr. Nixon differed from his colleague from Massachusetts. He pointed out that druggists were not

initiating new legislation in framing an interstate anti-narcotic law, because there are already two bills in Congress, the Harrison and the Wright bills, for controlling the sale of narcotics. Let us have a committee of five draft a reasonable bill, said Mr. Nixon, rather than have some one else draft an unreasonable one.

Charles M. Woodruff, who attended the convention as a representative of the National Association of



Group picture of the Ohio delegation, on the steps of the Auditorium building.

Manufacturers of Medicinal Products, then took the floor. "There are certain conditions to be met," he said. "Some druggists fought the Foster bill not because they opposed its purpose but because they thought another bill would accomplish the same purpose without doing so much injustice. The Foster bill is now revived in the Harrison bill, and you do not want the Harrison bill!" Mr. Woodruff went on to say:

Practical nullification of State laws by the regulations of interstate commerce is to be avoided. Hamilton Wright seems bound to pass a cocaine law to his liking, regardless of what the drug trade thinks of it. His bill has a good aim, but to subject a wholesaler or a manufacturer to a risk of a thousand or five thousand dollar fine for the technical error of a shipping clerk is wrong. We have drawn up a tentative bill that subjects neither wholesaler, retailer nor manufacturer to a fine.

Mr. Woodruff then went into details of the plan. This will be adopted instead of the Harrison bill if all concerned can get together on it. Mr. Woodruff concluded by supporting the appointment of a committee to draft an anti-narcotic law.

Mr. Woodruff's assertion that the association did not want the Harrison bill was later borne out by a report of the resolutions committee condemning the Harrison bill as impossible because it involved much useless red tape.

Following Mr. Woodruff, Mr. Shuptrine arose, maintaining that there was no body of men better fitted to draft laws bearing on the retail drug business than the retail druggists themselves. Mr. Meissner, too, argued it were better to be aggressive now, and ourselves formulate an anti-narcotic bill, rather than later have the necessity of fighting an unsatisfactory one made by others.

At this juncture, several arose to correct any misconstruction that might be made of Mr. Hubbard's argument. Mr. Anderson pointed out that it would be unwise for the druggist to surround himself with any more laws than were necessary. And Mr. Finneran of Boston also arose to pay tribute to Mr. Hubbard. He said: "In Massachusetts we have the best

cocaine law in the United States, and Mr. Hubbard is responsible for it. We have as good an anti-narcotic law as any, and Mr. Hubbard is responsible for it." Then Mr. Finneran proceeded to call attention to a point which he had never seen discussed in any of the pharmaceutical journals, namely, that representatives of the United States had gone to The Hague opium conference and had agreed to abide by its conclusions. Article 10, Section 3, offers a rule which it plainly states shall not apply to medicinal prescriptions and retail pharmacists. But notwithstanding this preamble, Hamilton Wright comes forth and desires to frame an anti-narcotic law to suit himself.

Mr. Wallace then took the floor. "For five consecutive years, a congressional anti-narcotic bill has been proposed and killed. Finally, druggists were told, if these bills are not satisfactory, why don't you frame a bill that suits all concerned?" Mr. Wallace urged the association to draft a bill that will provide a record of narcotic sales. Mr. Pflock supported this position by declaring that unless narcotics can be traced from State to State, the evil will continue as ever.

It seemed to be the general opinion of the audience that it were better for the N. A. R. D. to draft its own anti-narcotic law. The association felt that the effective pharmacy laws are those that the druggists have themselves prepared. After much more discussion by several speakers, it was finally resolved, therefore, that,

Whereas, the Legislative Committee recommends the appointment of a special committee of five to draft a national anti-narcotic bill, and

Whereas, several anti-narcotic bills have from time to time been introduced and are being considered by Congress, which bills are impracticable or decidedly onerous to the retail druggists without effecting the objects desired, therefore

Resolved, that the recommendation of the legislative committee be approved and the committee appointed to draft such a bill, such draft to be given the widest publicity and presented at the next annual convention of the Association for final approval unless conditions require earlier action, in which case it should first have the approval of our legislative committee.

THE PROPAGANDA WORK.

H. J. Holthoefer of Chicago scored the members of the association for their apathy toward the propa-



The Illinois delegation.

ganda movement. He said: "You have many words for price protection, telephone adjustments, and other things, but for propaganda work you have only apathy. Apathy! apathy! apathy! That is all we get!"

"Why, I heard of one doctor prescribing magma magnesiae, only to have the druggist call him up and ask what it was, adding that he had looked in all his price lists without finding the preparation!"

This stirred up the convention, and one after another the members took the floor. Mr. Rieburg of Wisconsin suggested that if a special man be employed to call on the doctors in the interests of the druggists, the latter should first agree on what preparations are to be fostered. Then the detail man can go ahead. In several Wisconsin cities the druggists have contributed \$10.00 each for this propaganda work. It brings us back, he said, to the good old-time compounding, and that is what we want.

Mr. Sieberz of Louisville, a member of the propaganda committee, deemed it advisable to lecture the medical students on U. S. P. and N. F. products, an idea that was recommended also by Dr. Anderson. Dr. Anderson took occasion to criticize the superficial courses in pharmacy offered in some medical colleges, saying it were better to supplant such study with a good grounding in incompatibilities, so that the physician upon graduating would be competent to write prescriptions. Many men dispense out of an inability to prescribe.

"Propaganda," continued Dr. Anderson, "was started to restore us to old conditions, to put us back behind the counter where we use our mortars and pestles and not merely be pourers of liquid from bottle to bottle! Tell the doctor that in the Pharmacopœia are all the drugs he needs. Let him prescribe them. Then let the pharmacist dispense the prescriptions and practice his profession. Physicians can't expect us to give up side-lines so long as they fail to write ethical prescriptions."

Dr. J. Wise of Atlanta told of the good accomplished by get-together meetings. In that city the druggists gave a "D" dinner—a dollar dinner to doctors, dentists, and druggists. "We gave them a cocktail to begin with," said Mr. Wise humorously, "later following with

by the first meeting. We arranged with the wholesale houses to prepare samples of a few N. F. preparations each month and distributed them among the physicians. The results were miraculous. To-day we have the physicians eating out of our hands. Conditions are most happy. When a doctor now prescribes one of those astounding proprietaries, he calls us up by 'phone to apologize."

After some remarks by several more speakers, Mr. Bruder took the floor to urge upon the members



Reading from the left, this delegation from Detroit comprises Grant W. Stevens, Mrs. J. H. Webster, Charles F. Mann, Miss Mann, Mrs. Mann, J. H. Webster and James W. Seeley.

of the association the need of raising money for the propaganda movement. "Go back home," he said, "and assess each druggist 10 or 15 dollars and go after the propaganda work. All the money you put into this project will come back to you many times over."

SHERMAN ANTI-TRUST LAW.

President Shuptrine maintained that the Sherman anti-trust act was losing ground. Its hardship to legitimate retail interests is being realized more and more, and the time is not far off, said Mr. Shuptrine, when it will be amended so as to meet all the just demands of the retailer and at the same time not detract appreciably from its power to check the large interests it was originally intended to control. It will be changed to meet the demands of all that is honest and legitimate.

Mr. Freericks pointed out in the legislative conference that we have to-day in industry two factions, the larger interests and the smaller interests. The larger interests could never effect a change in the Sherman act because it would be assumed that they were looking for something more than they were already getting. For this reason in the Clapp bill, drawn up by Mr. Freericks himself, and recently introduced in the senate, the farmer, the laborer, and the smaller manufacturers and retailers were all considered. But it was felt that class legislation would not be constitutional; so a Federal incorporation feature was inserted in the bill which would control all corporations, but which would permit corporations not for profit, but for common interests and common welfare, to get together under governmental supervision. This makes possible the segregation of the smaller from the larger interests, and permits the former to organize under the law.

The next step, continued Mr. Freericks, is to differentiate between restraint of trade and a restraint of reasonable competition which hurts all interests. By the Freericks-Clapp bill retail dealers may enter into

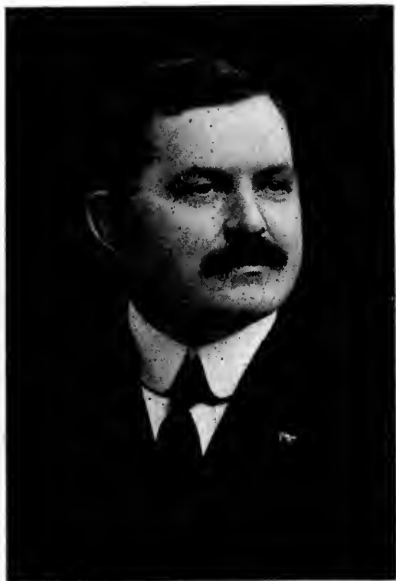


Some of the Southern members, with retiring President Shuptrine in the center.

an orange elixir and winding up with a curacao cordial, so that everybody went home feeling good."

Speaking of the get-together meetings in Savannah, Mr. Shuptrine said they were started by the doctors themselves. Druggists were guests of the physicians at one of their monthly meetings. "We went after them," said Mr. Shuptrine. "We called a spade a spade. For 2½ hours after the dinner we sat around talking things over. Then we reciprocated by giving a dinner to the doctors, which acted as a salve to heal the wounds left

an agreement whereby competition is reasonably restrained, and they may agree on prices provided there be no attempt to seek injury of one as against another. The aim is to prevent ruinous competition and allow all to enjoy the benefits of the act. To sum up, the Clapp bill aims first to afford a constitutional way of segregating the larger interests from the smaller, and secondly, to provide for trade agreements which shall



Henry W. Merritt, Plains, Pa., president elect.

be under Federal supervision so that no injury can be done to the people.

It was finally resolved that,

Whereas, the future and continued existence of retail merchants throughout the country depends upon a change of the Sherman Anti-Trust Act, which will allow the smaller business interests to cooperate against the growing evil on the part of a few to monopolize entire branches of the retail trade, and

Whereas, the Honorable Mr. Clapp, Senator from the State of Minnesota, has introduced in the Senate of the United States, Senate Bill 7017, providing for supplementary legislation to the Sherman Act, which will permit the smaller interests inclusive of the smaller merchants and laboring people to cooperate with each other, without being in violation of the Sherman Act, such legislation being by us deemed imperative for the future prosperity of the country; therefore be it

Resolved, that we heartily endorse and approve of Senate Bill No. 7017 as introduced by Senator Clapp of Minnesota.

FREERICKS IS HONORED.

Frank H. Freericks, who has been acting as legal adviser of the N. A. R. D. since Judge Errant's unfortunate illness, was presented with a silver set of 144 pieces by the executive committee in the name of the association. Charles H. Huhn, of Minneapolis, chairman of the executive committee, made the presentation speech. Starting in a humorous vein, he soon grew serious:

"When we were left in dire straits by the death of our former legal adviser," said Mr. Huhn, "we cast about a long while before we could find another. Finally we asked Frank Freericks and he agreed to act as our adviser, even though he was then suffering from overwork. In accepting the trust, he made one stipulation—that there would be no remuneration for his services.

"He has worked for us a long time and it is impossible for us to realize the great good he has done. Time alone can tell that, but we want him to accept this little token, not as remuneration, but as evidence of our appreciation and our gratitude."

THE TELEPHONE SITUATION.

Before commenting on the report of the telephone committee, we must tell of an amusing incident in which the chairman was a leading figure. It seems

that the *Chicago Daily Tribune*, on the morning of Aug. 14, published a little interview with Julius Rosenwald in which the latter said: "'Give while you live' is a better motto than 'Live and let live,' which we used to see over oyster houses, bon-ton markets and other marts of trade, and which never meant anything whatever." "That," said Mr. Bodemann, "I consider is a slur upon our motto, and I move a telegram be sent to the editor of the *Tribune* giving him the devil." At this, everybody had a laugh.

When the discussion of the telephone situation was resumed, Secretary Potts requested all men in cities of 75,000 or more who are not satisfied with their telephone conditions to state their grievances to Mr. Bodemann. There is a disposition on the part of the association to deal with the officials of the telephone companies with a view to obtaining for its members a fair share of 'phone receipts. The telephone question appears to be a local issue varying in different localities. Mr. Webster of Detroit said that in his city the druggists are very well satisfied with present arrangements. There are two companies in Detroit, the Bell and the Home. Druggists get a 40 per cent commission without any guarantee on all calls except long-distance ones, on which they get 10 per cent. Mr. Huhn reported that in Minneapolis they must give a \$4.00 guarantee, and even then get 20 per cent less than the Detroit druggists. In that city they get only 20 per cent of the telephone receipts. Mr. Huhn thought that there should be a level commission in all cities of 75,000 and upwards.

Charles Ehlers told of conditions in Cincinnati. He



Frank H. Freericks, Cincinnati, Ohio, who has done excellent work as advisory counsel for the N. A. R. D., and who was tendered a silver service in Milwaukee.

said the druggists there get 40 per cent on all calls over \$4.50 a month. This rate applies to the larger stores. Smaller stores get 10 per cent if they take in over \$3.00 a month. The company furnishes booths, and some stores have three or four. Booths have trebled the receipts.

Cleveland has two companies. One allows 40 per cent of all the money in the box at the end of the month. The other, the Bell company, gives the drug-

gists a 50 per cent commission on receipts over 20 cents a day. Conditions in Cleveland are now deemed ideal.

D. J. Reese said that satisfactory conditions prevail in Philadelphia. There are two telephone systems there, the Bell and Keystone. Mr. Pfluck declared that Philadelphia druggists have increased the telephone business in their city 300 per cent in seven years, all because they were satisfied with the contract. He impressed upon the convention the wisdom of remembering that fact in order that they might use it with telling effect in negotiating with the telephone companies.

Speaking of conditions in New York, Dr. Anderson said that the situation there could never have been cleared up without proper organization and conference with the company. A telephone committee was appointed by the druggists of New York, empowered to act with the company. This committee was responsible for the successful outcome of the trouble. The situation was serious. For a while it looked as though the pay telephone system would cease in New York pharmacies. But, thanks to the druggists' committee, the officials of the telephone company were brought to terms.

Wilhelm Bodemann, chairman of the telephone committee, expressed his displeasure over the action of certain cut-rate drug stores who offer their "free lunch" 'phones as an attraction to the bargain-hunting public, much to the detriment of the smaller stores.

FLURRY OVER DRUGGISTS' INDEMNITY EXCHANGE.

Considerable feeling was shown over the action of Executive Committeeman Thiesing of Cincinnati in bringing up a minority report of the Executive Com-



E. H. Thiesing, Cincinnati, who created quite a ripple on the calm waters of convention harmony by criticizing the Druggists' Indemnity Exchange.

mittee bearing on an investigation of the Druggists' Indemnity Exchange and the Underwriters' Service Company, two insuring companies with headquarters in St. Louis, Mo. It seems that both are under the same management. While the Druggists' Indemnity Exchange ranks high among the members of the association, Mr. Thiesing expressed some uncertainty as to its safety and reliability.

Such men as Charles F. Mann of Detroit and H. B. Guilford of Rochester at once demanded that this minority report be laid upon the table. Then the impression got out that there was a lurking desire to conceal the facts. So Mr. Guilford, seconded by Mr. Pritchard, moved that the minority report be taken from the table. This relieved all suspicion of any attempt to suppress the truth. Mr. Armstrong expressed his indignation that a minority report of the Executive



Charles H. Huhn, Minneapolis, re-elected chairman of the Executive Committee.

Committee had been brought up. He said in substance that the Executive Committee thoroughly indorsed the Druggists' Indemnity Exchange and he resented as a reflection on the probity of the committee any attempt to put the Druggists' Indemnity Exchange on the grill, when these committeemen had once indorsed it. Finally Mr. Thiesing admitted that the matter was too voluminous for consideration in open session. To facilitate business the matter was referred to the committee on resolutions, where it died a peaceful death.

This was the only ripple on the peaceful waters of the convention, unless mention be made of Mr. Meissner's violent opposition to an attempt to close the nominations shortly after they had been made. Dr. Anderson wanted to do this in order to expedite the proceedings and give the resolutions committee a chance to begin work. But Mr. Meissner objected to such steam roller methods, as he called them. Therefore, the report of the nominating committee was received but held open another day. A somewhat spirited argument arose, too, over credentials, but of that we shall speak later.

ARGUMENT OVER CREDENTIALS.

It is too bad that so much time was lost arguing over credentials that there was little opportunity to discuss the coupon price-protection plan. Attorney Freericks would have been glad to say something on

that subject had he found a chance to take the floor. Mr. Boehm urged the establishment of a special bureau whose function it would be to explain by correspondence the workings of the coupon system.

The argument over credentials arose over a decision on absent and unaccredited delegates. There were but 179 out of a total of 902 accredited delegates present. The constitution of the association allows each State and affiliated local association a certain number of delegates, and provides that "the votes representing the absent delegates shall be cast in the same ratio as the votes of those present." The committee on credentials held that those delegates who were not present, and whose credentials had not been received by the association, were not regularly delegated. This aroused indignation on the part of representatives of associations which had only a minority of their delegates present, and who claimed that they were entitled to a full number of votes regardless of the representation in attendance.

It was finally resolved that each State association



Grant W. Stevens, Detroit, treasurer elect.

be accorded membership in the N. A. R. D. by the payment of \$25.00 a year, and should be entitled to two delegates at each annual convention; and that local associations be accorded representation at the annual meetings of the N. A. R. D. on a basis of one delegate for each 25 members or fractions thereof.

BEAL RECOMMENDED AS WILEY'S SUCCESSOR.

The convention recommended the appointment of Dr. James H. Beal of Scio, Ohio, as successor to Dr. H. W. Wiley, resigned, as chief of the Bureau of Chemistry in Washington. A resolution to that effect was introduced by Frank H. Freericks. The convention acted upon it at once and then telegraphed the result to President Taft. Charles M. Woodruff said Dr. Beal would be the ideal man. Charles W. Tobey of Ohio said that Dr. Beal was not only a chemist but a lawyer, a man of sound judgment, and clean as a whistle. Mr. Pritchard maintained that Dr. Beal didn't want the job. To this Mr. Freericks replied that often the man best qualified for a position is least

willing to accept it. He said further that if it be to the interests of pharmacy to have Beal in that place, why not force the position upon him in so far as that be possible?

The resolution, as finally adopted, was as follows:

Resolved, that the National Association of Retail Druggists in convention assembled, speaking for its membership of thirty-five thousand pharmacists, urges upon President Taft the appointment of Dr. James Hartley Beal to the position of Chief of the Bureau of Chemistry, for the reason that his special fitness and qualifications, his fearless, well-balanced and thoughtful determination, his noted disposition to avoid sensationalism and to thoroughly deliberate, make him the one man among men to serve truly the best interests and welfare of the public.

LIST OF OFFICERS.

The following officers were elected:

President, Henry W. Merritt, Plains, Pa.

First Vice-President, Sol A. Eckstein, Milwaukee.

Second Vice-President, H. W. Rietzke, St. Paul.

Third Vice-President, H. S. Keubles, Pella, Iowa.

Secretary, Thomas H. Potts, Chicago.

Treasurer, Grant W. Stevens, Detroit.

Executive Committee: Charles H. Huhn, Minneapolis, chairman; J. Arthur Bean, Boston; Herman C. Shuptrine, Savannah; Samuel C. Henry, Philadelphia; H. B. Guilford, Rochester; and A. E. Zuber, Chicago.

While it was necessary to elect six executive committeemen this year as heretofore, that will not be necessary in the future. Henceforth, by an amendment of the constitution, it will be necessary to elect only two members of the Executive Committee a year. Of the six men now elected, two will serve for three years, two for two years, and two for one year.

OFFICERS OF WOMEN'S ORGANIZATION.

The Women's Organization of the N. A. R. D. elected the following officers: President, Mrs. J. F. Waterhouse, Boston; first vice-president, Mrs. J. E. McBride, Youngstown, O.; second vice-president, Mrs. William Busch, St. Louis; third vice-president, Mrs. J. J. Seiberz, Louisville, Ky.; fourth vice-president, Mrs. J. O. Bosley, Wilmington, Del.; fifth vice-president, Mrs. R. G. Rutherford, Brooklyn, N. Y.; secretary, Mrs. Nellie Lee, Philadelphia; treasurer, Mrs. Anna J. Greenland, Cincinnati. Board of directors: Mrs. L. O. Wallace, Auburn, N. Y.; Mrs. W. S. Richardson, Washington, D. C.; Mrs. L. Emanuel, Pittsburgh; Mrs. J. T. Rowe, Mobile, Ala.; Mrs. A. J. Reis, Rock Island, Ill.; Mrs. S. A. Eckstein, Milwaukee; Mrs. C. D. Fox, Roanoke, Va.; Mrs. W. A. Warm, Keyport, N. J.

THE ENTERTAINMENT.

The attendance was good, the paid registration being over 1000. Numerous affairs were given for the visiting delegates and their families. One afternoon they were guests of Col. Gustave Pabst in a tour of inspection through the Pabst brewery. This was followed by a trolley ride to Whitefish Bay, where a fish dinner was given by Col. Pabst. The banquet of the Tampa-Cuba Cigar Co., held in the auditorium, was a very enjoyable affair. Mr. Guilford, Mr. Berger, president of the company, and Mr. Huhn made speeches that brought out plainly the prosperous nature of this co-operative enterprise.

Just where the N. A. R. D. convention will be held next year will not be decided till January. But the Cincinnati delegation were hot after it.

DENVER MEETING OF THE A. PH. A.

The Most Important Action Was to Create a "House of Delegates"—A Representative Legislative Conference Again Proposed—The Famous "Broken Senna" Case Featured—Pungent Paper by Dr. H. H. Rusby on Legal Shortcomings of the U. S. P.—New Requirements Imposed by Conference of Faculties—The Boards Discuss Reciprocal Registration—Nashville Selected for Next Convention.

Seventeen years ago the American Pharmaceutical Association met in Denver. This year it was the pleasure of the organization to convene once again in that beautiful city. A better place could not have been selected. The country was so unusual, the scenery so attractive, the people of Denver so hospitable that every one returned full of delight with the trip. Many took the fifty-mile trolley ride winding among the foothills skirting the Rockies on the way. Others visited Wilmore's Dahlia Farm—a paradise of flowers. One day was given up to a trip to Glacier Lake. After the convention, any number of members and their families left for the Yellowstone.

THE CREATION OF A "HOUSE OF DELEGATES."

But while it is tempting to dwell on the pleasures attending the A. Ph. A. convention, this is not intended



F. W. Meissner of La Porte, Indiana, Robert S. Lehman of New York, and Hugo Kantrowitz, also of New York, are taking a little stroll in the park.

as a travelogue. A lot of hard work was accomplished. Many matters of importance were brought up for consideration. The first step of real consequence was a proposal to form a House of Delegates, a suggestion that apparently emanated from Treasurer H. M. Whelpley and General Secretary James H. Beal. This body, it was intended, should serve as a sort of hopper into which should be emptied all half-baked suggestions to emanate later in a form acceptable for prompt consideration. It was Secretary Beal's idea that the House of Delegates should be a sort of clearing house where resolutions could be referred for the purpose of separating the wheat from the chaff. The proposals, molded into shape by the House of Delegates, could then be presented to the Council, which in turn would report them to the general assembly. The House of Delegates, it was pointed out, could handle things which

couldn't be brought up conveniently in the general sessions.

ARGUMENTS PRO AND CON.

At first there was a slight undercurrent of suspicion among those not yet acquainted with the functions of the House, lest it serve as a means of centralizing authority in the hands of a few and thus lessen the weight of the council and the general membership. But Secretary Beal made it very clear that the House would not be able to usurp any of the power already vested elsewhere. It was simply intended to expedite business. E. G. Eberle brought out the point that the function of the House of Delegates would not be that of *initiating* resolutions, but only of *considering* or redrafting those which were recommended to it.

A delegate, as Secretary Beal pointed out, is little more than a name. Prof. Remington, too, said that it had always pained him to see delegates come to the convention and then have nothing to do when they got there. The Council has been doing the work.

If a delegate is not a member of the Association he can talk only by special permission. This is an important point as we shall see later, because the House of Delegates will be composed in a measure of men not members of the A. Ph. A. Under present conditions, different bodies are invited to send delegates who upon their arrival have little or no function.

DETAILS OF THE PLAN.

In view of the fact that the formation of the House of Delegates marks such an important change in the organization of the A. Ph. A., we print the following resolutions creating this new body and defining its duties. They were adopted by the Association:

1. There is hereby created a House of Delegates to have and exercise such functions as are herein or may be hereafter specified by the Council.

2. Until the membership of the House of Delegates shall be otherwise determined by the Council, it shall consist of such regularly elected or appointed delegates from State and local societies, colleges and schools of pharmacy and delegates from the National Association of Retail Druggists, National Wholesale Druggists' Association, American Medical Association, National Association of Board of Pharmacy, Women's Organization of the National Association of Retail Druggists, National Association of Manufacturers of Medicinal Products, American Chemical Society, Association of National and State Food and Dairy Departments, the National Association of Pharmacologists, pharmacists in the government service, and scientific men in the employ of the government, the credentials of all of whom shall be approved by the Council, and five members of the Council appointed by the Chairman of the Council. The President, President Elect, Treasurer, General Secretary, and the Chairman and Secretary of the Council shall be members *ex-officio*.

3. The elected or appointed delegates shall hold office for one year, or until the credentials of their successors shall have been approved by the Council. Each society or institution recognized shall be entitled to three delegates, and each delegate shall be entitled to one vote. No delegate shall act as the proxy of another delegate not present, nor as delegate for more than one society or institution. Any member of the Association may attend any session of the House of Delegates, and shall have the privilege of the floor.

4. The House of Delegates shall organize annually by the

election of a Chairman, two Vice-Chairmen, and a Secretary. For the purpose of such annual organization the first session of the House shall be called to order by the Chairman, one of the Vice-Chairmen, or the Secretary of the preceding House, or in the absence of all of them, by the Secretary of the Council.

5. The House of Delegates shall have authority to adopt all rules and regulations necessary to the proper conduct of its business, and not inconsistent with the Constitution and By-laws of the Council.

6. The House of Delegates shall hold at least one session during the annual meeting of the Association, at an hour previously determined by the Council, and such additional sessions as may be necessary for the transaction of its business, but shall make a final report of business transacted to the final session of the outgoing council at each annual meeting.

7. Until otherwise determined the House of Delegates shall exercise the following functions:

(a) To receive and consider the reports of delegates from the bodies which they represent in the House of Delegates.

(b) To act as a general committee on resolutions and to re-



Prof. José P. Alacán, the well-known pharmacist and teacher of Havana, Cuba, was at the Denver convention with his family. Professor Alacán is the gentleman at the right, and his assistant, Dr. Francisco Ramirez, stands at the left.

port to the Council not later than its last session a series of resolutions upon topics concerning the general welfare of the Association or concerning any features of the Association's work.

(c) To consider and report upon such resolutions, and upon such other subjects as shall be referred to the House of Delegates by the Council or by the Association in General Session.

8. Until otherwise provided the order of business at the first session of the annual meeting of the House of Delegates shall be as follows:

(a) Calling the roll of delegates whose credentials have been approved by the Council.

(b) The reading of communications from the Council or from the Association in General Session.

(c) The election of officers.

(d) The appointment by the chair of a sub-committee on resolutions to prepare and put into proper form, resolutions for subsequent consideration by the House of Delegates.

(e) Calling the roll of delegations for the reception of reports, resolutions and communications. At all subsequent sessions of each annual meeting the order of business shall be such as the House of Delegates shall determine.

9. At its first annual meeting the House of Delegates shall consider and report to the Council a body of by-laws and any recommendations it may have to offer concerning the form of organization, method of working, or concerning the scope and character of the functions which should be exercised by the said House of Delegates.

Some objections were raised to the name "House of Delegates." A few said it was too common, being already in use in various organizations. Others, however, claimed the name was too pretentious. To the latter criticism, Dr. Beal replied that the name had been purposely made big in order that the members of the House might be inspired to live up to it. It was like the man, he said, who hung a eulogy to his first wife on the wall in order that his second wife, seeing it, might take inspiration therefrom. Dr. Beal went on to say that if the House of Delegates proves a success, it would be given further powers.

Dr. Anderson was made chairman of the House of Delegates. His experience as chief of the resolutions committee of the N. A. R. D. should make him an excellent man for the office.

JUDGE HAND'S KNUCKLES RAPPED.

A very lively discussion arose in the meeting of the National Association of Boards of Pharmacy over the slur cast some months ago by Judge Hand of New York upon the pharmacists of this country. The matter may have been brought to the attention of the Association by the paper of Prof. Rusby read the evening before, criticizing the conditions that made possible such a decision as that of Judge Hand in the "broken senna case." The Judge, piqued by the criticism of his decision among pharmaceutical men, had referred to the druggists in slighting terms. This prompted the following resolution:

The National Association of Boards of Pharmacy, by a special committee referring to the statement of Judge Hand, in the famous broken senna case, reported as follows:

Whereas, the Judge has issued the statement that pharmacists are "men of no great learning," be it

Resolved, that we protest against this statement for the reason that it does a great injustice to men of a learned profession who, as a class, will compare in every way with those of any other profession.

Caswell A. Mayo advised the delegates present to resent any such attack appearing in a newspaper by writing a red-hot letter to the editor. "When I see anything like that," said he, "I go right after them."

DR. RUSBY'S PUNGENT CRITICISM.

The foregoing action of the National Association of Boards was evidently called forth, as we have suggested, by a paper read by Dr. H. H. Rusby before the Section on Education and Legislation. This paper was entitled "The Legal Aspects of the Pharmacopœia," and was visibly inspired by Judge Hand's decision. We may say parenthetically in this place that the Hand decision



Here we have, reading from the left, Prof. Clyde M. Snow of Chicago, Hugo Kantowitz of New York, and Prof. H. C. Washburn of Denver. Unfortunately Professor Washburn fared rather badly at the hands of the photographer.

in the now famous "broken senna" case was discussed by the BULLETIN OF PHARMACY at some length on pages 265 and 266 of the July number. Those who are interested in the merits of the question we refer to our former article. Reverting now to Dr. Rusby's paper, for which we unfortunately have very little space, we may quote certain parts as follows:

It would be ungenerous, if not actually unjust, to criticize the present Pharmacopœia because of its shortcomings as an authority in the interpretation of our pure drug statutes. True, it was compiled for the purpose of establishing standards for the articles recognized, but, there being at that time no Federal or very important State statute based directly upon these standards, the latter were prepared with a view to their professional rather

than their *legal* application, and the vast influence for good and evil which was to be wielded, and now is wielded by those standards, had probably occurred to the mind of none. Now the difference between the *legal* and the *professional* application of a standard, while perfectly clear to those who have abundant experience, is not so to all others. If it were, this paper would not be presented.

Let us, for example, consider the subject of senna. We have, first, the title, which is merely "senna." By a common-sense construction, this would be extended to include Alexandria senna and India senna, because these are mentioned in the description. By a narrow construction, these would be excluded, and I have actually known an attorney to argue for such exclusion, in a very similar case. Moreover, the title "Tinnevely senna," though a fully recognized synonym of India senna (professionally and in common sense) would be excluded, unless given in the index of the book. This would be true of all other synonyms. Furthermore, it has been frequently held that the term senna itself would be so excluded, if coupled with a qualifying word to show its condition, as broken, cut, granulated, powdered, in No. 60 powder, etc.

Let us next consider the definition: "The dried leaflets of *Cassia acutifolia* Delile (Alexandria Senna), or of *Cassia angustifolia* Vahl (India Senna) (Fam. Leguminosae)."

Now, if a 500-pound bale of senna was sold that contained one pound of stems, stones, seeds, other leaves, or foreign matter of any sort, its sale would be prohibited according to legal technicality, because this definition refers only to the leaflets. This interpretation is, however, in the case of senna, modified by something which follows, and which will be considered further on. Now a judge, professing to be very practical, says that such an interpretation would be absurd, because practically no senna of this description would ever be found in commerce, so that the enforcement of this absolute standard is impracticable. It being thus established, on sound reasoning, that some foreign matter *must* be allowed, reason is at once dethroned to make way for the declaration that, no permissible amount being specified in the Pharmacopœia, any amount may be admitted! No professional man, and no rational being, would so rule. But judges are not permitted to officiate rationally. A rational being is one who seeks a desirable result or end, and who adapts and employs his means for securing that result. A court is a machine that has been constructed to exalt, in practice, the means above the end, to fall down and worship at the shrine of the means and to rule that the end is of no consequence when its attainment requires the subordinating of the means unto it. It is pointed out to him, that the Department, seeing this necessity, has decided to allow 5 per cent, but he replies that this is legislation and that the Department has no right to read into the law things which are not there. It is thus decided that any amount of adulteration can be permitted with senna, for the specific reason that the Pharmacopœia forbids any adulteration whatever!

For these reasons Dr. Rusby thought action should be taken along the following lines, with reference both to the U. S. P. and the N. F.:

1. That some provision be made, in all cases, for the presence of impurities in drugs, and that this provision be so worded that it shall be sufficiently comprehensive.
2. That a drug under a name not found in the book, but which is a modification or combination of a name or names found therein and understood to apply to the same article as that so named, shall be subject to all the requirements for the drug so understood.
3. That supplements containing additional tests, approved by the committee, shall be published annually, and shall have the same force as the original text.

RECIPROCAL EXCHANGE OF CERTIFICATES.

An interesting situation arose in the meeting of the National Association of Boards of Pharmacy over the question of reciprocal exchange of certificates between the States. Mr. Dodds of Illinois introduced a resolution recommending among other things that the rating for reciprocal exchange be raised two points above the present average to 77. He held that boards of pharmacy strained a point or two in favor of candidates who were slightly deficient. Mr. Dodds went on to say that while the Illinois Board might pass a man in that way, it hesitated to recommend him to other States. By raising the average two points a man not fully qualified can be prevented from registering in other States.

F. B. Lillie said it was generally admitted that certain boards favor their own candidates. Local conditions do govern the registration of candidates by the

State Board. Mr. Lillie argued that to remove all doubt of a man's fitness, the mark should be raised a few points above the average if he desires the privilege of practicing in another State. A man's condition sometimes influences the board. If he be poor and desires to go into business, the board, a few members of which know the deserving fellow personally, may be influenced to pass him. But Mr. Lillie contended that men who thus slide through their examinations should not be allowed to practice in other States unless they pass the examination in the State which they desire to enter.

But this idea did not prevail. The majority held that a man who was registered in one State was entitled to reciprocal registration, regardless of the conditions under which he first obtained his papers. So they voted down the proposition to raise the examination requirements to 77 per cent for those who want the privilege of reciprocal registration.

Of course, the action of the Association of Boards in this matter is only advisory. The Association can't pass a resolution compelling State boards to accept men. The Association merely suggests such action. The real power resides in the individual State board. It can accept or reject candidates regardless of their grades.

There was some agitation over a proposition that candidates for registration before a State board be made



This interesting group of N. F. Revisers was snapped in front of the Brown Palace Hotel. Reading as usual from the left, we have Prof. Harry Vin Army, E. Fullerton Cook, Prof. Clyde M. Snow, Leonard A. Seltzer, and Wilbur L. Scoville. These were the only members of the National Formulary Committee at the convention.

to pay \$5 to the National Association of Boards in addition to the regular fee to his own State for registration. Frank Freericks, however, said this wouldn't be legal in all States.

DISCUSSION OVER DEGREES AND STANDARDS.

In this connection we might call attention to the remarks of Professor Remington in the meeting of the Conference of Pharmaceutical Faculties where the question of degrees was up for consideration. Only three States, he said, have prerequisite laws. He cautioned the teachers present that they must not make it too hard for men to get a college education. The universities, he said, are giving correspondence courses in pharmacy and we must not make the requirement for entering college so high that the men will study pharmacy by mail instead. Give a chance, he urged, to the man of only fair means and fair ability. What are the

attractions of the retail drug business, he asked, that you feel privileged to make the requirements so high? Professor Remington felt that one must consider this proposition with both feet firmly on the ground, instead of getting up into thin air. Pharmacy for pharmacists, he urged, not pharmacy for analytical chemists. The colleges provide suitable courses and higher degrees for men who want to be government chemists



Dr. W. C. Anderson, Brooklyn, N. Y., elected chairman of the newly created "House of Delegates."

or hold some such high positions. But how about the apothecary? What are we doing for him? The colleges should keep their eye on the apothecary and do everything possible for him.

Dr. Ascher, following Prof. Remington, likewise cautioned colleges against advancing the requirements too high and putting too many restrictions on candidates for admission.

Professor Remington argued for the approval of the degree of "Doctor of Pharmacy." Other professions confer the doctorate degree, and why not pharmacy?

NEW REQUIREMENTS OF THE CONFERENCE OF FACULTIES.

The Conference of Pharmaceutical Faculties concerned itself with the establishment of requirements for entrance into the colleges, and for graduates therefrom. While the members came to no agreement as to how much training should entitle students to the various degrees that are given, they did succeed in laying down well-defined entrance requirements. These cannot be evaded. It shall be the duty of each member of the Conference of Faculties to prove the credentials presented by each student. An executive committee shall examine those credentials and pass upon them.

Evidence of education of 15 counts beyond the eighth grade shall be required of each candidate for admission. A "count" consists of one hour's instruction a week during the school year. As Prof. Koch explained, a count was a unit of measure whereby it would be possible to express the requirements for admission in the briefest form possible. No mention is

made of the words "high school" in the entrance requirements. The student can get his education anywhere by tutoring and private study if he so desires.

The conference shall have a right to investigate any school. The schools must prepare, on special blanks, complete lists of students enrolled, showing the credentials and standing of each student. These records shall be certified by the Dean and submitted for examination to the conference.

A NATIONAL LEGISLATIVE CONFERENCE PROPOSED.

W. A. Hover of Denver, in his speech conveying the greetings of the National Wholesale Druggists' Association, urged that more time be given to legislative suggestions. The sale of narcotics and habit-forming drugs, for instance, uncovers a problem requiring the united efforts of all branches of the drug trade. "We, as wholesalers," said Mr. Hover, "are just as anxious as the retailers to bring about statutory reforms that shall correct the narcotic evil. We are all working for the same end to restrict the sale of narcotics to the proper channels and for purely medicinal purposes."

To bring about a solution of the problem, said Mr. Hover, there should be a coöperative effort on the part of retailer, manufacturer and wholesaler. He then recommended a joint legislative conference composed of representatives from the M. A. M. P., N. W. D. A., N. A. R. D., and A. Ph. A. to work out a practical law for regulating the sale of habit-forming drugs.



W. A. Hover, the well-known Denver jobber, who suggested once more that a representative legislative conference be called under the auspices of the A. Ph. A.

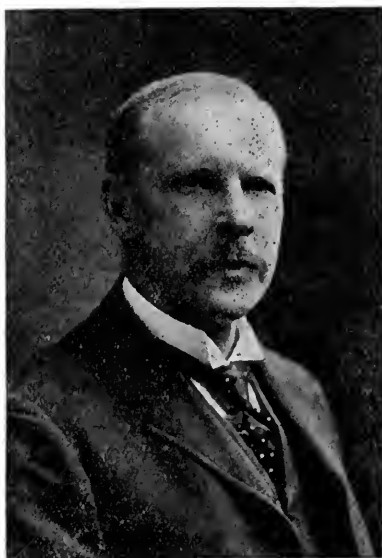
Last year, at the Boston meeting, Henry P. Hynson, of Baltimore, suggested a National Legislative Conference to be composed of representatives from all branches of the drug trade. Mr. Hynson's suggestion has since received the attention of the N. A. R. D. and A. Ph. A., and will probably be put into effect before January 1.

It seemed to be the opinion of the convention, however, that a National Legislative Conference should be held under the auspices of the A. Ph. A., because all branches of pharmacy are represented in this body. Such a conference belongs properly to the section on education and legislation.

Charles M. Woodruff, who attended the convention as a delegate from the National Association of Manufacturers of Medicinal Products, said that a national conference would do much good, though not necessarily in a single session. Considerable work would have to be done by the conference. There is so much diversity of opinion about laws, so much conflict between State and Federal rulings, that we don't know exactly where we are at. A national legislative conference will, it is hoped, bring about greater uniformity in the law and lessen the confusion. Both State and Federal rulings will receive the attention of the conference.

SCHOLTZ ADVOCATES COMMERCIAL PHARMACY.

One of the most interesting talks delivered at the convention was an address before the Commercial Section by E. L. Scholtz, who conducts a chain of drug stores in Denver under the name of the Scholtz Drug



Dr. H. H. Rusby, of New York, whose paper indirectly criticizing Judge Hand for the latter's decision in the "broken senna" case called forth a spirited resolution.

Company. Near him sat Mr. Kendall, the owner of a very prosperous prescription pharmacy in Mississippi. There were two types of druggists, each the antithesis of the other, but each a successful master of his own particular style of pharmacy. They were not only able druggists but excellent speakers as well, and it was a pleasure to listen to their debate.

Progressive pharmacies, contended Mr. Scholtz, the stores that are popularized, are the ones that are putting up the larger number of prescriptions. Mr. Scholtz cited a case in point. A drug store had been making money merchandising, but had neglected prescriptions. At the suggestion of a medical friend, the owners established a separate prescription department, without expecting big returns. But the department soon became one of the most profitable in the store.

On the other hand, however, Mr. Scholtz wanted to have a strictly physicians' drug store in Denver to carry doctors' needs only. But the physicians advised him against it, saying that such a pharmacy would not attract any more prescription patronage than a com-

mercial drug store, and the landlord didn't want to rent his place to a strictly prescription establishment. There is no advantage in the purely prescription drug store in the city, argued Mr. Scholtz. If you want to have the least revenue from the place, and have plenty of time to read the newspaper, run a prescription pharmacy. But if you want to make the most out of the stand conduct a mercantile drug shop! The public demands it, and we can't stop evolution. With the old-fashioned drug store you were sick when you went in and sick when you came out. But the modern drug store is an emporium of fashion.

But Mr. Kendall of Mississippi had other views of the business. "I run a strictly prescription business," he said, "and I advertise that I own the only drug store in the city of Meridian. I don't have a package of paint or garden seed in the place. I have a half-dozen dispensers in my store and don't care to change my system. My idea of the drug business is to specialize and be a real pharmacist."

Mr. Kendall said furthermore that the place for a druggist is in the front of his store. Contrary to Mr. Scholtz, who does a soda business of \$100,000 a year in his various stores, Mr. Kendall does not have a fountain. He maintained that a woman who sits down at a fountain to drink soda will go elsewhere for a fountain syringe or package of toilet cream, so there you are.

SOME OF THE PRESIDENT'S RECOMMENDATIONS.

President John G. Godding of Boston, in an address which, unlike many presidential papers, had the marked merit of brevity, recommended among other things that the association carry out its purpose and undertake the publication of a book of recipes—a collection of unofficial formulas. This recommendation was approved subsequently by the committee to which the president's address was referred, and the Council was requested to take the necessary steps to carry the recommendation into effect, the suggestion made, however, that in the compilation of the recipes only those be selected which will prove uniformly reliable. Under the heading of drug reform, President Godding bewailed the fact that while the pharmacist must comply rigidly with the various food and drug laws, the physician is permitted to go scot-free. The committee, acting upon this complaint of the president, expressed its opinion that "all who dispense drugs in any way should be made amenable to the law governing the traffic in drugs." The committee also thought that the subject should be referred to the Section on Education and Legislation for further action of a definite sort. Other subjects touched upon by President Godding in his address were the National Formulary, the Journal of the A. Ph. A., the Pharmaceutical Syllabus, the N. A. R. D., the State associations, the local branches, prerequisite legislation and deceased members.

A JOINT BOARD OF HEALTH.

We have in each State five different boards to look after the public health. They consist of from five to seven members each. Such methods, said Secretary Beal, are wasteful. Nor are they efficient. They don't exclude the incompetent from practicing their professions. They don't keep poor drugs out of the market.

Secretary Beal recommended that these different

bodies be replaced by one central board composed of representatives of all the different professions affected. This would do away with the present multiplicity of boards. Dr. Beal maintained that such a system would be more economical. We should have one attorney, instead of five, and he would be able to accomplish more, for this reason: To-day when we try to enforce a pure food and drug law in a locality the attorney, hired to do the prosecuting, hesitates lest he offend the community upon whom he depends for his practice. The attorney for the defendant has only to claim to the magistrate and the jury that the pharmacy laws aim to give a certain body a monopoly of the drug business and the guilty man goes free. An attorney, hired by a joint State board of health, could work more effectively.

Dr. Schneider, of San Francisco, approved of this centralization of power. Prof. Rusby, too, thought well of Secretary Beal's plan, but added that every locality must have its own board to look after ice-cream plants, bakeries, and food shops generally. But he thought that the enforcement of the law, after the experts had made their report, should reside in a central board.

HONORARY MEMBERSHIP IN A. PH. A.

In one of the meetings of the Council Joseph W. England suggested it would be advisable to bestow honorary membership on men who have made contributions to pharmacy abroad. Dr. Whelpley received this proposal coldly. He reminded the Council that the last time honorary members had been suggested the idea had been turned down because the men thus remembered showed little appreciation of the honor.

Chas. Caspari, Jr., said he was one of those who opposed the indiscriminate distribution of such honors for the reason that American pharmacists had been notoriously slighted abroad. That is to say, they had received no signal of recognition. Neither England nor France had conferred any honors upon our pharmacists, said Dr. Caspari. America, on the other hand, has been very liberal. Dr. Caspari then added: "They may think we are trying to honor ourselves by getting into our ranks men of distinction. We should be very sparing in the distribution of honors."

Secretary Beal took another view of the matter. He cited one or two instances where prominent foreign pharmacists had shown real interest in the work of their American brothers and paid them several courtesies. Mr. England added that the cold attitude of European pharmaceutical leaders to us is changing. They can be induced to give us their coöperation and support. It was finally decided to elect one or two foreign pharmacists of note to honorary membership in the association annually.

NOMINATIONS FOR NEXT YEAR.

Following out its usual practice, the association selected three sets of nominees for the general offices, the elections to be made later on by mail. The nominees are:

For president: Charles M. Ford of Colorado, George M. Beringer of New Jersey, and F. W. Meissner of Indiana.

For first vice-president: Franklin N. Apple of Pennsylvania, Jose P. Alacan of Cuba, and Ernest Berger of Florida.

For second vice-president: G. H. P. Lichtardt of California, W. S. Richardson of the District of Columbia, and John C. Wallace of Pennsylvania.

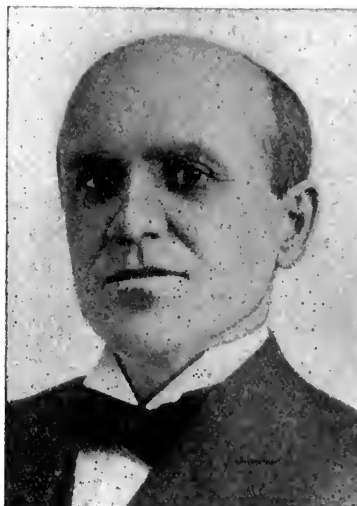
For third vice-president: S. K. Sass of Illinois, L. D. Havenhill of Kansas, and D. F. Jones of South Dakota.

Candidates for the Council, three of whom are to be elected: J. G. Godding of Massachusetts, S. L. Bresler of Colorado, H. C. Packard of Massachusetts, L. C. Lewis of Alabama, Charles E. Caspari of Missouri, W. J. Teeters of Iowa, W. C. Anderson of New York, Charles Caspari, Jr., of Maryland, and Leonard A. Seltzer of Detroit.

ELECTIONS.

Of course, General Secretary James H. Beal and Treasurer H. M. Whelpley were reelected. Owing to the good work of Treasurer Whelpley the delinquency list of the association has been reduced to almost *nil*. Every member is paying his dues.

The association is not apt, either, to lose the valuable services of Secretary Beal, if we may judge from his speech of acceptance after being made secretary of the association for another term. He said: "I do not recognize that there is any position where one can do more for American pharmacy and the people at large



A. V. Pease, Fairbury, Nebraska, chairman elect of the Commercial Section.

than he can as secretary of the American Pharmaceutical Association. I seek no higher honor." These remarks are very significant just now, since Dr. Beal has been spoken of repeatedly as Wiley's successor in Washington.

New chairmen of the various sections were elected as follows: Section on Commercial Interests—A. V. Pease, Fairbury, Nebraska; Section on Education and Legislation, Prof. W. J. Teeters, Dean of the School of Pharmacy of the University of Iowa; Section on Practical Pharmacy and Dispensing, J. Leon Lascoff, of New York; New Section of Pharmacopœia and National Formulary, S. D. Havenhill, of Kansas; Historical Section, J. G. Godding, of Boston.

The Scientific Section has reorganized and will henceforth have its own by-laws. The following have been elected for the next year: President, F. R. Eldred, of Indianapolis; first vice-president, John M. Francis, of Detroit; second vice-president, W. L. Scoville, of Detroit; secretary, F. P. Stroup, of Philadelphia.

NASHVILLE NEXT MEETING PLACE.

The next convention of the A. Ph. A. will be held in Nashville, Tenn. In view of the central location of this city, a large attendance is looked for.

TWENTY-FIVE DRUGGISTS AND THEIR INCOMES.*

By HARRY B. MASON,
Editor of the "Bulletin of Pharmacy."

For years I have been contending that many druggists fail to make their stores yield them a sufficient measure of profit. In making this statement I am not criticizing druggists for the *size* of their business—that is another story. What I have particularly in mind is the question of returns—making every dollar's worth of business produce what it ought to in the way of net earnings. Regardless of the volume of his sales, a good merchant should attain a

apolis meeting of the American Pharmaceutical Association. This paper was subsequently printed in the volume of proceedings for that year. I am now using over again the statistics concerning these eleven druggists, and am supplementing them with the facts about fourteen more so that more accurate conclusions may be reached. Without further introduction I shall now present the table, divided in two portions because of its length:

	A	B	C	D	E	F	G	H	I	J	K	L	M
Annual sales	\$26,108	\$25,200	\$25,150	\$25,107	\$23,823	\$21,000	\$19,658	\$19,507	\$17,757	\$16,028	\$15,557	\$13,590	\$13,336
Cost of goods sold.....	17,600	17,159	15,773	12,336	16,496		11,407	11,918	11,437	10,249	9,922	8,019	8,893
Gross profits.....	8,508	8,041	9,377	12,771	7,327		8,251	7,589	6,320	5,779	5,635	5,571	4,443
Expenses.....	4,684	4,835	4,719	6,000	6,702		3,643	4,223	5,520	4,011	3,878	2,705	3,106
Net profits	3,824	3,206	4,658	6,771	625	1,716	4,608	3,366	800	1,768	1,757	2,866	1,337
Percentage gross profit (on sales)	32½%	32%	37%	51%	31%		42%	40%	36%	36%	36%	41%	33½%
Percentage expense.....	18%	19%	19%	24%	28%		18½%	22%	31%	25%	25%	20%	23½%
Total income (including proprietor's salary).....	\$5,824	\$4,286	\$6,658	\$7,670	\$1,825	\$3,116	\$5,608	\$5,216	\$2,000	\$2,768	\$2,957	\$3,616	\$2,337

	N	O	P	Q	R	S	T	U	V	W	X	Y
Annual sales.....	\$12,224	\$10,541	\$10,066	\$9,753	\$8,500	\$8,152	\$7,845	\$7,717	\$7,336	\$7,331	\$6,426	\$5,890
Cost of goods sold.....	7,814	5,264	5,457	5,959	5,100	5,219	5,323	3,999	4,115	4,432	4,160	3,511
Gross profits.....	4,410	5,277	4,609	3,794	3,400	2,933	2,522	3,718	3,221	2,899	2,266	2,379
Expenses.....	2,919	2,728	2,400	2,112	2,600	1,677	2,089	2,683	1,655	2,463	1,988	1,155
Net profits.....	1,491	2,549	2,209	1,682	800	1,256	433	1,035	1,566	436	278	1,224
Percentage gross profit (on sales).....	36%	50%	45¾%	39%	40%	36%	32%	48%	44%	40%	35%	40%
Percentage expense	24%	26%	24%	21¾%	30½%	20½%	26¾%	34¾%	22½%	33½%	31%	19¾%
Total income (including proprietor's salary).....	\$3,051	\$3,449	\$3,109	\$2,607	\$2,000	\$2,256	\$2,261	\$2,235	\$2,466	\$1,636	\$1,278	\$1,823

more or less definite percentage of profit, and if he doesn't do this he is failing to make the most of his business. Now in order to show the wide difference between druggists in this respect, I propose to present a comparative table exhibiting in detail the actual facts about 25 druggists scattered throughout the country.

Back in 1906 I read a paper entitled "Eleven Druggists and Their Incomes" at the Indian-

First, now, a few words of explanation about these tables. The "cost of goods sold," as the phrase indicates, does not represent the actual purchases of the year, but, instead, the purchases as added to or subtracted from by the inventory differences. The "expenses" invariably include the item of proprietor's salary, which runs from \$600 up to \$2000 or more according to the size of the business. The "total income" might seem a little confusing if I did not say that this was gotten by adding the proprietor's salary to the net prof-

*Address delivered by invitation before the Iowa State Pharmaceutical Association, Sioux City, July, 1912.

its. The former, as already explained, is included in the expense account, but it is used again here for the purpose of showing the total yield which the druggist gets from his business. The other facts in the table are self-explanatory. Deducting the cost of goods sold from the annual sales, we learn the gross profits, and from the gross profits deducting in turn the expenses, we are left with the net profits. The *percentage* of gross profit is then secured by dividing the volume of gross profits by the volume of sales. In similar fashion the *percentage* of expense is derived by dividing the volume of expense by the volume of sales.

Now let us study some of the exceedingly interesting things about these tables. There is a lot of food for thought here—material worthy of serious and careful consideration. I shall content myself, however, with pointing out a few things only, for the most part leaving the tables to tell their own story to those who care to ponder over them.

SURPRISING VARIATIONS IN EXPENSES AND PROFITS.

I have said that the object of this paper, and the purpose of these tables, were to show the great differences between druggists in profit-making capacity. Now witness the facts—consider first, for instance, the percentage of gross profit yielded in these 25 stores. *It varies from 31 to 51!* Notice next the percentage of expense. *This varies from 18 to 35!* Thus the percentage of profit realized by some druggists is less than two-thirds that of their neighbors, while it costs some men twice as much to do business as it does others! There is really no excuse for wide variations of this character. It is true that some druggists have to meet more competition than others; that prices vary in different localities; that as a rule expenses are higher in the city than in the country; but with a full realization of such conditions I am nevertheless convinced that these things do not explain except in part the widely varying incomes which different druggists derive from their stores, and that in the last analysis the results can be traced directly to the druggists themselves.

Now let us study some cases which illustrate this point. You will see from the tables that the businesses are enumerated in the direct order of their sizes, beginning with the largest one of \$26,108 a year and running down through the list to a store having annual sales

of only \$5890. We start off with five businesses of just about the same volume—A, B, C, D and E. These were all in what you might call the \$25,000 class. The conditions were much the same in all 5 cases; there were no great differences of environment to explain away pronounced differences in results; and with establishments of about the same size you would therefore expect expenses and profits to be very nearly alike. But notice the wide variations. D realized a total income of \$7670 a year, and C \$6658, while E was able to make but \$1825. Admittedly, however, there is something peculiar about the large gross profit of 51 realized by D, and with this exception it will be seen that the percentage of profit of all five men ran about the same, with C a little in the lead. The percentage of expense with A, B and C was also nearly identical, running from 18 to 19, whereas E had an expense of 28 per cent. It is this high and unnatural expense of E, for a business of that size, which accounted for his small total income from the business. He ought to cut down expenses and do it quick! His percentage of profit, too, was the smallest in the group, and his net profit was only three per cent when it should have been at least ten.

Next we have G and H, with businesses practically alike in volume of sales. These stores were in the \$20,000 class, and they both did about equally well. The singular thing about it is, though, that G is located in the city of Chicago, while H is in a small country town. The city man was able to make a gross profit of 42 per cent, while the country druggist, theoretically supposed to get better prices, could only make 40 per cent. Likewise, strangely enough, the city man's percentage of expense was less, even though it usually costs considerably more to do business in a big town like Chicago than it does elsewhere. G's showing, however, is really much above the average, and it is very apparent from his expense statement, as I have it in detail, that he worked hard himself and probably got along with one registered clerk and one boy.

DIFFERENCES IN PROFIT-MAKING CAPACITY.

Next we have a group of five men in a class of their own—I, J, K, L and M. These businesses ranged from \$14,000 to about \$18,000 annually. Here the surprising fact is that L, down toward the lower end of the group in point of sales, made more money than the

others. With sales of \$3000 less than I, he realized a total income of \$3646 as against \$2000. His percentage expense was the lowest in the group, while his percentage of gross profit was the largest—and these figures tell the whole story. They tell the whole story, indeed, with every business, and they are the figures which should be watched most closely. Keep your percentage of gross profit up, and your percentage of expense down—that's a safe rule.

We pass on to a small group made up of O, P and Q, with \$10,000 businesses. These men are not so very far apart, but the striking fact here is that O made an astonishing *net* profit of 24 per cent despite the fact that the business was run by a manager. O is a physician who was compelled to turn the store over entirely to employees, but, though a professional man, he is possessed of keen commercial instincts, and he sees to it that the vital question of profit is always considered. He pays his manager a salary of \$900 a year, and he gets net profits of \$2549 from the business. I have arbitrarily added the \$900 to the volume of net profits in this case, making a total income of \$3449, in order to put the statement on the same comparative basis with the others, since this is what the manager would be realizing if he owned the business as do the other druggists represented in the tables.

Another interesting group is made up of R, S, T, U and V. These businesses are in the \$8000 class. Here we find, as in the previous group, that the man whose sales are smallest makes the most actual money expressed in terms of total income. He realizes an income of \$2466 on a business of \$7336—a strikingly good yield. His percentage of expense is very low for a small business, and his percentage of profit is high. He has realized the truth that the farther apart you can keep these two figures the better off you are. To force one up, and to screw the other down, is the chief problem in business. One man in this group, U, has an abnormally big expense, nearly 35 per cent, but fortunately he realizes a big gross profit of 48, so he "gets away with it." A gross profit of 48 is certainly astonishingly good, and this man must have a direct pipe line of some kind.

Finally, we have three druggists left—W, X and Y—with small businesses ranging from \$7331 to \$5890. Here again the low man in

point of sales is the high man in point of profit. Y does less than \$6000 worth of business a year, and yet he gets a nice little income from it of \$1800. Not so bad! He is located in a country town; his expenses are small; his wife probably helps him out at times, and even though the business is small he doubtless lives quite well.

WHAT THE PERCENTAGES OF EXPENSE AND PROFIT OUGHT TO BE.

Now I have said that, volume of sales apart, success in business largely depends upon keeping the percentage of gross profit and the percentage of expense as far apart as possible. Put a big wedge in between these figures and drive them away from one another! It will be seen from the tables that, in a certain rough sense, the percentage of expense increases as the business diminishes—that is to say, it costs relatively more to conduct a small store than a large one. What are called the "overhead expenses" are condensed over a smaller area of sales. Thus the tables begin with A, whose percentage expense is 18, and gradually, although not uniformly, the percentage of expense increases until, with some of the smaller businesses, it runs up over 30 per cent. E, with a business of \$23,823, is a prominent exception to this rule. His percentage of expense is 28, when it ought not to exceed 20 or 22 with a business of that size.

Is it possible to say with any degree of accuracy what the percentage of expense and the percentage of gross profit ought usually to be? Well, let us see what the averages are as disclosed by these tables. I find upon calculation that the average gross profit realized by these twenty-five druggists was 38 $\frac{2}{3}$ per cent. The average expense, on the other hand, was 24 $\frac{1}{2}$ per cent. My experience leads me to believe, after studying the statements of many other druggists beside those represented in this paper, that these averages are pretty nearly typical of what you will find the country over. I have often said, for instance, that the usual percentage expense was 25, and the usual gross profit from 35 to 40.

THE GOAL TO REACH.

I believe that every druggist ought to hold these average figures before him, and strive in every possible way to attain them. If his percentage of expense runs very much beyond 25, including his own salary, he is spending too

much money somewhere and he ought to begin retrenchment. If his percentage of profit falls much below 35 or 38, he should begin an earnest investigation of the facts. Of course, if a man is located in a city where the prices are lower, he may find it pretty difficult to make a gross profit exceeding 32 or 34 per cent, but in such localities there is an opportunity for him to increase his volume of business so that he can cut down his ratio of expense. A net profit of less than 10 per cent certainly betrays wretchedly poor management, and the figure ought to be as near 15 as possible. Fifteen per cent should be the goal for every druggist in the country. And why, indeed, shouldn't he attain it since 14 is apparently the general average? He ought to be able to take his annual volume of sales, calculate 15 per cent of this amount as the net profits, add to the result his own salary as proprietor, and thus obtain the estimated total income which his business should be made to yield him.

When you talk like this to the ordinary druggist, he replies, however, that all these things sound very well when uttered by word of mouth, but that it is a very different matter to apply them in fact. He argues that you can't change the conditions of your business very materially, and that every merchant is the creature of circumstances. This is all tommyrot. More than once I have seen a business radically changed in profit-making character within a year or two as soon as the owner of it realized that a change was necessary. "*Realized that a change was necessary*"—that's the point! The average druggist doesn't know what profit he is making on his goods. He is selling a lot of things below actual cost, when the expense of doing business is considered, and he doesn't realize it. Once let him wake up and he will begin to correct the situation very fast.

SOME REASONS FOR FAILURE.

It isn't the purpose of this paper, however, to show in detail how druggists delude themselves about the question of profit, nor is it my intention to indicate how things may be im-

proved. These considerations I have discussed elsewhere in other papers and addresses. I may say, however, that four or five vital mistakes are made by perhaps a majority of druggists. Some of them keep no business records at all and have no idea about their profits and expenses. Others do make a fist at it, but fall into the common error of basing their percentage of profit on the sales, which is right, but in practice applying it on the cost, thus losing money very frequently under the astonishing delusion that they are making it. Still others fail to include a salary for themselves among their expenses, and thus believe themselves to have a very low percentage expense and to be making money with great rapidity. Others again lose two or three hundred dollars a year by failing to take advantage of their cash discounts, or falsify their profit records by failing to take inventories, while there is another group of men who own their store buildings, charge themselves no rent in the expense account, and thus get nothing in the way of interest on their money. In this and in other ways druggists are frequently ignorant of what the actual facts are about their incomes, or, if not really ignorant, are greatly deluded.

Very often, if druggists only knew it, they are selling patent medicines and even candy and cigars at a very low profit—if, indeed, they make anything at all on them. It is frequently true, of course, that these things cannot be thrown out even if they fail to be profit-makers, but if the druggist finds by actual, close knowledge of his business that he has a large percentage of goods in stock which yield him a low profit, and which pull down his general average of gross profit to a small figure, then his duty is plain—he should boost up profits on other lines, put in new things which yield handsome returns, reduce his expenses, and strive in every way possible to make the figures at the end of the year what they ought to be. Knowledge is power. Once let a druggist know that he is not doing as well as he thinks he is and he will get himself out of trouble. The great difficulty often is to make him realize that he is living in a fool's paradise.



“MY BEST PAYING SIDE-LINE.”

**The Seventh of a Series of Important Articles—Making a Success of Electrical Goods—
What Stock to Carry—Where to Obtain Supplies—How to Push the Line.**

**By JACOB LUSTIG,
Cleveland, Ohio.**

One of my best side-lines and one which pays me a very nice profit is electrical goods. I refer to lamps and various electrical devices. As electricity is being used more and more each day the need for such appliances becomes



Jacob Lustig.

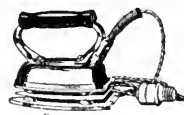
more apparent. The druggist stands a very good chance of getting this trade for the reason that his store is open day and night. He is in a position to supply these articles, especially the lamps, when the hardware or electrical stores are closed.

STARTING IN.

The stock that one handles need not be very large at the start—especially if one is near the jobber. A good opening order would include the following items: $\frac{1}{2}$ dozen 8-candlepower carbon lamps; 1 dozen 16-candlepower lamps; $\frac{1}{4}$ dozen hylo lamps; $\frac{1}{2}$ dozen 25-watt tungsten lamps; 1 dozen 40-watt tungsten; $\frac{1}{2}$ dozen 60-watt tungsten; $\frac{1}{4}$ dozen 100-watt tungsten; $\frac{1}{4}$ dozen electrical irons; 1 6-inch disc stove; 1 nursery milk warmer; 1 toaster stove; 1 curling-iron heater and 1 heating pad, the latter an improvement on the hot-water bottle.

This would make a very good selection at

an outlay of about \$50. Most any electrical jobber would be willing to quote prices, and in case there were no such jobbers near one could deal direct with the factories—the Westinghouse or General Electric. The retail prices on these articles are mostly fixed, thereby insuring the dealer against cut prices and a net profit of from 20 to 25 per cent. I handle the



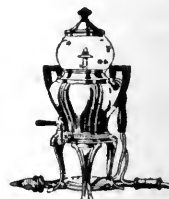
The Electric Iron relieves the drudgery of ironing day. No overheated kitchen; no walking to and from the stove. Costs about 30 cents per month for current for family of four



The Electric Heating Pad is the modern hot water bottle. The heat is controllable. Five cents worth of current will keep it warm all night. Price \$6.00.



The Electric Nursery Milk Warmer heats the baby's milk to the proper temperature in three minutes. Useful for many other purposes also.



The Electric Coffee Percolator makes the most delicious coffee in twelve minutes. A cent's worth of current will make coffee for several breakfasts. Price \$15.00 and up.

Ask us to show you these and other Westinghouse Electrical Devices

LUSTIG'S CUT RATE DRUG STORE

BANK BUILDING
8446 BROADWAY, COR HARVARD
CLEVELAND, OHIO.

One page of a folder on electrical supplies distributed by Mr. Lustig.

Westinghouse line through a jobber, the Enterprise Electric Construction Co., 5307 Euclid Avenue, Cleveland, Ohio. I don't know of any jobbers in other cities who deal in these goods, but I am sure if one were to go to any local electrical concern he could make some suitable arrangements. In case there is no

jobber in a town, one can communicate with the Westinghouse Electric Mfg. Co., Pittsburg, Pa., or the General Electric Co., Schenectady, N. Y. They will gladly give any information desired on the subject.

PUSHING THE LINE.

To push the sales I had a lamp rack made and connected it up with electricity, which displays each style of lamp. When the rack is placed in the back of the window with the devices arranged in front, it makes quite a display. Electricity in the home being comparatively new, such a trim always draws people to the window and creates comment, especially

at night when the rack is aglow with light. Then, too, personal talks to one's customers help quite a bit. Mention such articles as lamps, toasters, irons, and heating pads for home use and also as gifts on birthdays and holidays, or card-party prizes.

One could advertise these various articles in the newspaper. I distribute a leaflet regularly to the homes. I am sure that the druggist who puts in this side-line and gives it the proper amount of attention in the way of displays, advertising, and talks will have little cause for regret. The goods are clean and easy to handle. They do not occupy much space and the profits are good.

THE LEGISLATIVE SITUATION IN PHARMACY.

The Whole Field of National and State Legislation is Considered in Detail, Principles for Incorporation in All Pharmacy Acts are Suggested, and a Legislative Conference Representing All Branches of the Trade is Earnestly Recommended.

By JOHN C. WALLACE.*

It has been a matter of keen regret to me that some action was not taken on the recommendation of Henry P. Hynson, made at the Boston meeting last year as Chairman of the



John C. Wallace.

Committee on Legislation, in regard to the formation of "The Legislative Conference of the American Pharmaceutical Association," in

*Address of the Chairman of the Section on Education and Legislation of the American Pharmaceutical Association, delivered at the Denver meeting last month.

order that it might be used as a clearing house in matters pertaining to legislation for the different branches of the drug business, all of which are affiliated with the A. Ph. A.

When we take up the study of the pharmacy and pure drug laws, and come to a realization of the wonderfully diversified ideas incorporated therein, we will come to the conclusion that a clearing house is badly needed.

THE THREE OBJECTS.

All pharmaceutical legislation has had and will continue to have three fundamental aims in view—the advancement of pharmacy as a profession, the protection of the pharmacist, and, of equal if not greater importance, the protection of the people. Fortunately these three things are so closely allied that laws affecting or benefiting one are apt to have the same result upon another. New features of course arise each year as new conditions are encountered.

The one necessity which stands foremost to my mind is that of passing laws which will meet the conditions and give protection, *and still not be too drastic*. This sounds like the impossible, and I confess the solution is beyond me and I think I may safely say beyond any one man. Satisfactory and practical phar-

macy laws (I mean laws which are satisfactory to the majority, for there are too many interests affected for them to be satisfactory to all) are the result of months and often years of work and study on the part of men realizing their need and far-reaching importance, and looking at the question from every side.

The problems are very much the same throughout the various States. The laws enacted show clearly what these problems have been and how met. A comparison of the various legislative measures of these States on subjects now most before the public makes them stand out more forcibly than anything I could say on this subject. I shall make a brief tabulation along this line later.

Some of the States are making rapid advancement in pharmaceutical legislation. Others have laws which do not seem to be adequate for present conditions. The druggists, however, are doubtless not satisfied with them themselves, and regard them as a stepping-stone. Any one having experience along this line appreciates fully the difficulty of obtaining what you want, especially when a radical change or advance is contemplated. It takes time and gradual progress to bring the desired result. Through all the ages, advancement along any line or in any profession has had to contend with "The old was good for my father and for me; why change?"

It has been said by one of our most distinguished statesmen that legislation is universally a case of compromise; we therefore cannot wonder at the diversified character of legislation found upon our statute books.

AS TO NATIONAL LEGISLATION.

That there was abundant need of such legislation as the Federal food and drugs act will not be denied, for the benefits accruing from it are discernible upon every hand. Many articles which were formerly offered as pure food have been entirely eliminated, and those of us who have been actively engaged in the practice of pharmacy realize the advantages of the law not only to us, but to the whole people. Few will dispute the fact that the food and drugs act has been successful in performing a very important mission, but experience has taught us that it should go still farther, and there is at this time undoubtedly a need for its being amended, as there is also a need for other national legislation upon lines which seem to us to be very important.

That there should be a remedy for the false, extravagant, and misleading claims made for the many worthless preparations with which the country is flooded, is almost unanimously conceded. I am of the opinion that all patent or proprietary preparations should be manufactured by or under the supervision of one who has been thoroughly trained and qualified for the purpose.

Twelve of the States have already adopted the single standard, and I see no reason why a single standard should not be established under the law for preparations for which a formula is given in the authorities recognized by the act. As to crude drugs and chemicals, the label should explicitly state in unmistakable terms wherein they differ from the official standard, so that any one purchasing them would know exactly what they were buying.

The exclusion of wood alcohol from preparations for external use only is not in my judgment justified.

There is an absolute necessity for a national law which will give a complete record of all sales of habit-forming drugs in interstate commerce, so that they can be transmitted to those having the enforcement of the State narcotic laws, since intrastate regulation loses much of its effect without interstate regulation. And this can be done without levying any additional tribute on the trade, by enacting a law requiring registration of all sales of narcotic or habit-forming drugs, or preparations containing more than a maximum amount of them, made in interstate commerce, and reporting the same monthly to a central bureau in the Department at Washington, the latter to furnish monthly a copy of the record of all sales or shipments of such drugs or preparations into a State, to the authorities having the enforcement of the narcotic laws in that particular State.

Every State in the union has enacted a pharmacy law, and all of these laws were originally founded upon the same lines. Many of them have been constantly amended, and many need still further amendments. The enforcement of all of them is entrusted to the boards of pharmacy. I deem it unnecessary at this time to take up these laws separately and classify the different conditions relating thereto as it would be almost an endless task. I will, however, a little later, cite a number of principles which I think should be incorporated in them.

Since the enactment of the Federal laws 44 States of the Union have enacted food and drug laws, and in these various measures wonderfully diversified opinions as they relate to pharmaceutical legislation are made manifest, and for the purpose of illustrating this I have scheduled a number of the features of the State laws.

STATE PURE DRUG LAWS: WHO ENFORCE THEM?

Board of Pharmacy: Delaware, Illinois, Iowa, Massachusetts, New York, Pennsylvania, Virginia. Total, 7.

Board of Health: California, Colorado, Indiana, Kansas, Louisiana, Montana, New Hampshire, New Jersey, Vermont. Total, 9.

Food and Dairy Commissioner: Michigan, Missouri, Ohio, South Dakota, Texas, Washington. Total, 6.

Department or Commission of Agriculture: Florida, Georgia, North Carolina. Total, 3.

Agricultural Experiment Station: Nevada, North Dakota. Total, 2.

Commissioner of Agriculture and Industries: Alabama.

Dairy Commissioner and Director Agricultural Experiment Station: Connecticut.

Dairy, Food and Sanitary Inspector: Idaho.

Dairy, Food and Drug Commissioner: Nebraska.

Commissioner under Board of Health: Maryland.

Director Agricultural Experiment Station: Maine.

Commissioner of Health: Oklahoma.

Commissions: Arkansas, by State treasurer, Secretary of Agriculture, Mines and Manufacturers, and Secretary of State; Kentucky, by Director Agricultural Experimental Station and one member from State Medical and State Pharmaceutical Associations; Rhode Island, by Board of Food and Drug Commissioners; South Carolina, by Board of Health and one druggist; Tennessee, by Food and Drug Inspector; West Virginia, by Agricultural Department and County Prosecuting Attorneys; Wyoming, by Dairy, Food, and Oil Commissioner.

STATE PURE DRUG LAWS: HOW THEY DIFFER.

Only five of the States of the Union have enacted pure drug laws, viz., Arizona, Minnesota, Mississippi, New Mexico, and Oregon. Wisconsin has a pure drug law that relates

only to flavoring agents, and specifically sets forth a standard for each one.

Twelve of the States have adopted a single standard for all official preparations. They are Colorado, Delaware, Florida, Idaho, Illinois, Kansas, Louisiana, New York, Ohio, South Carolina, Texas, and West Virginia.

Five of the States have a restricted standard, and Maryland permits of variations same as the Federal law, except the preparations of opium, from which no variation is permitted.

New Jersey permits no variation from the official standard of the official preparations of opium, camphor, ginger, peppermint, and iodine.

Pennsylvania permits of no variation from the official standard of the official preparations of opium, iodine, peppermint, ginger, camphor, and ethyl nitrite.

Tennessee provides that no tincture of iron or preparation of opium, iodine, camphor, ginger or peppermint, as defined in the U. S. P. or N. F., shall in strength differ from the standards therein laid down.

Virginia permits of variations same as the Federal law except with reference to laudanum, which must conform strictly to the standard in every way: other official preparations of opium may differ from standard as to amount and strength of alcohol only, but the facts must be plainly stated on the label.

Seventeen of the States, Alabama, Arkansas, Colorado, Florida, Georgia, Iowa, Kentucky, Michigan, New York, North Carolina, Ohio, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, and West Virginia, exempt prescriptions of U. S. P. and N. F. preparations from the labeling clause.

Two of the States, Nebraska and New Jersey, exempt prescriptions, recipes, U. S. P. and N. F. preparations from the labeling clause.

Nine of the States, California, Idaho, Indiana, Kansas, Louisiana, Maine, Maryland, Missouri, and North Dakota, exempt prescriptions from the labeling clause but require all U. S. P. and N. F. preparations to be labeled.

Connecticut and Tennessee exempt prescriptions and U. S. P. preparations from the labeling clause.

Virginia exempts prescriptions and U. S. P. and N. F. preparations, provided they are of official standard.

Montana exempts prescriptions and extemporaneous preparations dispensed by druggists.

Oklahoma exempts prescriptions, and the alcohol content is not required, but aside from the alcohol content U. S. P. and N. F. preparations are not exempt.

Delaware does not require the ingredients to be stated on the label and makes no provision for misbranding.

Nevada makes no provision for a statement of any of the so-called interdicted articles to be made upon the label.

New Hampshire, Texas, Washington, and Wyoming require prescriptions and U. S. P. and N. F. preparations to bear labels mentioning all of the interdicted articles. Texas, however, does not require a statement as to alcohol content.

COMPARISON OF STATE ANTI-NARCOTIC LAWS.

Thirty-seven of the States, Alabama, Arkansas, Colorado, Connecticut, Florida, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Utah, Virginia, Washington, and West Virginia, prohibit the sale of cocaine except on prescriptions. California permits the sale of cocaine in preparations that do not contain more than one grain to the ounce.

The District of Columbia permits the sale of cocaine in preparations that do not contain more than $\frac{1}{4}$ grain to the ounce.

Idaho and Wisconsin permit the sale of preparations that contain not more than $\frac{1}{8}$ grain to the ounce.

Rhode Island and Texas permit the sale of preparations of cocaine that do not contain more than $\frac{1}{16}$ grain to the ounce.

Seven of the States prohibit the sale of opium or its derivatives or preparations, except on the prescription of a physician. They are Florida, Indiana, Kansas, Michigan, New Jersey, Oregon, and South Dakota.

Rhode Island permits the sale of preparations containing not more than six grains of opium to the ounce.

Georgia and West Virginia permit the sale of preparations that contain not more than 4 grains of opium to the ounce.

Massachusetts permits the sale of preparations that contain not more than $2\frac{1}{2}$ grains of opium to the ounce.

Alabama, Arkansas, California, the District of Columbia, Idaho, Louisiana, Maryland, Montana, New Mexico, New York outside of the City of New York, North Carolina, Texas, Virginia, Washington, Wisconsin, and South Carolina, sixteen States in all, permit the sale of preparations containing not more than 2 grains of opium to the ounce.

GRADUATION PREREQUISITE LAWS.

But three States in the Union have inscribed upon their statute books a graduation prerequisite law—New York, Pennsylvania, and Rhode Island.

A graduation prerequisite law has been under discussion by a number of State pharmaceutical associations, but in some quarters has met with much opposition. Those who are opposed to the idea want to compromise the proposition by making the requirement that it should be graduation from a recognized school of pharmacy or *an equivalent of education* to be determined by the board of pharmacy.

In the first place I know of no way in which a pharmaceutical education, equivalent to that required for graduation from a reputable college of pharmacy, can be obtained—except from such a college.

In the second place, boards of pharmacy cannot or at least do not give sufficient time in their examinations to ascertain if the applicants have the equivalent of graduation.

Third, the requirement of graduation from a recognized school of pharmacy, to my mind, removes to a great extent the question of politics from the board of pharmacy, and leaves no loophole for an applicant without the requisite qualifications, but with a strong political affiliation and influence, to become a registered pharmacist.

During the enactment of the graduation prerequisite law in Pennsylvania, I had the honor of being chairman of the Committee on Legislation of the Pennsylvania Pharmaceutical Association, and many curious ideas and objections were encountered, one of which was the plea that we were placing a barrier upon the poor boy who was ambitious to become a registered pharmacist. I am fully convinced, however, that any young man who is honest, industrious, intelligent, and ambitious can become a graduate of any reputable college of pharmacy in the United States without being an object of charity from any one.

PRINCIPLES TO INCORPORATE IN STATE PHARMACY LAWS.

As to the suggestion of principles which I think should be incorporated in a pharmacy law, I submit the following:

That all laws relating to pharmacists should be executed by pharmacists.

That a store remote from a pharmacy should be licensed to sell drugs and medicines in original packages, put up by or under the supervision of a pharmacist, and properly labeled with dose and directions.

That a pharmacy should be licensed and the license renewed annually, a charge being made for the original license and for each renewal. The applicant for this license and for each renewal should state in his application the location of the pharmacy, the name or names of the person, firm or corporation owning or conducting the same, and the names of all persons and employees engaged in the conduct of or carrying on of the store who are registered as pharmacists or assistant pharmacists, with the number and date of their certificates of competency and qualification. This license should entitle the holder thereof to own or conduct a pharmacy at the place only for which it is issued. Same can be transferred in the name only of the holder, and without charge.

That pharmacists and assistant pharmacists be licensed, the licenses to be renewed annually without charge.

That each applicant for examination and registration should be subjected to preliminary examination, the equivalent of at least a completed first year in a high school.

The students of pharmacy should be registered and should have a preliminary education which would entitle them to make application for examination and registration as assistant pharmacists after having had the required amount of experience.

That any license to practice should be refused, suspended or revoked for good and sufficient reasons, same to be stated in the act, but not without notice and a hearing.

That all certificates and all licenses should be conspicuously exhibited in the place of business, or where the licensed pharmacist or assistant pharmacist is employed.

That a license should be used only by the person to whom it is issued, and no license should be used to conduct more than one pharmacy or one licensed store.

That provision should be made for the right of interchange of certificates with other States having equivalent requirements.

That it should be a misdemeanor to impersonate an applicant who should be applying either for a certificate or for a license.

That all rules and regulations made by the board should be approved by the Attorney-General.

That drugs administered or dispensed by physicians should conform to the standard of strength, quality, and purity fixed by the laws of the Commonwealth.

That no person should use the title "pharmacist" or "assistant pharmacist" except when so licensed, or that of "pharmacy" or "licensed store" except when holding a license.

That every pharmacy should have a copy each of the latest editions of the U. S. P. and National Formulary.

That the authorized agents of the board should have the right to enter any place where drugs are compounded, dispensed or sold, for the purpose of purchasing samples, and should have the right to purchase samples in order that tests may be made.

That all drugs offered for sale at retail should be plainly labeled.

That the sale of poisons should be restricted, and the registration clause be strictly enforced.

That all physicians' prescriptions compounded and dispensed should be filed by the pharmacist and kept for a reasonable period, to be stated in the act, and during that period should be open to inspection by the police authorities upon presentation of an order from the court or from members of the board of pharmacy.

That when a physician indicates in writing that a prescription is not to be renewed, it should be a misdemeanor to either renew it or to give a copy of the same.

A LEGISLATIVE CONFERENCE RECOMMENDED.

There doubtless are many other principles which should be incorporated, and which a conference would bring out. In conclusion, I have but one recommendation to make, and that is to repeat the recommendation made at the Boston meeting by Dr. Hynson, as Chairman of the Legislative Committee, that a National Legislative Conference be established under the auspices of the American Pharmaceutical Association.

A RAZOR WINDOW.

By H. A. DORR,
Sapulpa, Oklahoma.

This display was especially devoted to safety razors. It extended from the floor of the window to the top, so that every person walking by was bound to see it. On the floor arranged in semicircles were cartons of the razors, while several packages were also attached to the wall of the trim. The background consisted of white oilcloth, which served to show up the

of Chicago, Ill. One placard bears the caption "shave and save," and goes on to show in figures the economy effected by shaving oneself. Blades are also quoted, the price being 7 to 35 cents.

Across the top of the trim appeared the sign "Diamond Drug Co." This was made of cardboard. I did the work myself and must say



Mr. Dorr's razor window.

cartons well and lend a sharp outline to the pictures.

In the center may be seen an elderly gentleman who has shaved half of his face with the Gem razor. Written across his chest is the phrase, "Well, that is fine." The price appears distinctly on the shaving stand together with a statement of guarantee. Both cartons and signs were furnished by the Gem Cutlery Co.,

that it showed up very well. The diamond shape, of course, helped to impress the firm name on the observer.

I ran this display two weeks altogether, but I made a few changes in that time for the reason that a contest was on for the best window display. This trim certainly sold many Gem razors for us, and this is what windows are for—to sell goods.

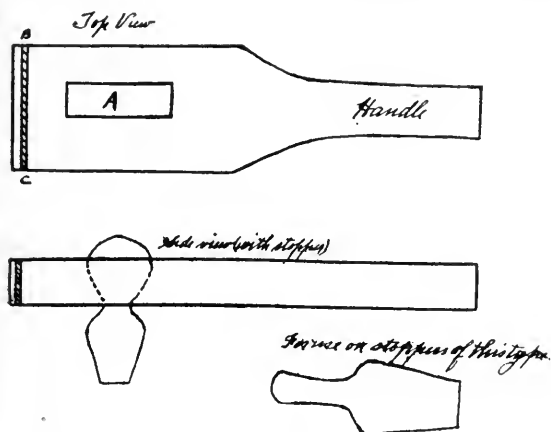


DOLLAR IDEAS

IMPLEMENT FOR LOOSENING GLASS STOPPERS.

Wm. Burton Spire, Washington, D. C.:

Take a piece of wood about six to eight inches long and, using a chisel, cut a hole (A in the accompanying illustration) the size of the top of stoppers found in five-pint acid bottles. One end can be made into a handle, and a band of metal or wire can be placed about the other end (B to C) to prevent the wood



from splitting when force is applied. I have found this very useful.

The device can be used only on the kind of stoppers illustrated in the diagram. By placing the implement over the top of the stopper (as shown in the drawing, side view) and forcing the stopper to turn, the disastrous results often obtained by heating the neck of the bottle or by striking the stopper may be avoided. It is especially applicable in removing stoppers from five-pint acid bottles.

PREVENTING LOSS OF SALES DUE TO SHORTAGES.

Daisy A. Frick, Audubon, Iowa: I keep a record on the back sheets of the want-book of all sales lost, entering the name of the article and its price. The aggregate loss of sales in a month's time may surprise you as it did me. The next step is to ascertain the cause and then hasten to apply a remedy. If you are not entering items on your want-list with close attention, get yourself and your clerks in line. If there is a repeating demand for other articles for which you can't take a special order, get the business by stocking the goods regularly.

TO HOLD A FUNNEL STEADY.

Stewart T. McGee, South Berkeley, Cal.:

Often while filtering a liquid the funnel will tilt. The liquid runs over and must be filtered a second time. To avoid this trouble remove the top and bottom from a round can, leaving



the can proper in the form of a cylinder. Place this "steadier" over the bottle shoulder, insert the funnel, and the latter will not tilt. Asphaltum varnish makes a good dust-proof coating for the tin. For a five-gallon bottle a seven-pound chloroform can makes a holder just right for a half-gallon funnel.

FITTING A LARGE CORK IN A SMALL BOTTLE.

E. J. Hall, Jackson, Miss.: When necessary, a large cork may be made to fit a small bottle if treated as shown in the accompanying sketch. Two wedge-shaped sections are cut



from the stopper at right angles to each other (see Fig. 1). The points are squeezed together as in Fig. 2, and the end inserted in the bottle as is illustrated in Fig. 3. Wet the cork slightly and the whole operation will be easier.

\$9724, the gross profit amounted to \$4089. Dividing the profit by the sales, we find the percentage of gross profit was 42.05, a very good showing.

Having determined the gross profit, \$4089, we have only to subtract the expenses, \$1143, to learn the net profit, which is \$2946. But we still have to subtract from \$2946 the proprietor's salary of \$1200, which should have been drawn out, and which finally gives us \$1746 as the net profit. Dividing \$1746 by the sales, \$9724, we find the real percentage of net profit is 17.95, a very high figure.

Let us see what the percentage of expense amounted to. Adding to the expenses given, namely, \$1143, the proprietor's salary of \$1200, we find the total expenses were \$2343. This divided by the sales, \$9724, gives 24.09 per cent. This is a low percentage of expense, which explains the large net profit.

In these figures we have ignored the item of \$387 which the proprietor actually drew out, assuming that it was part of the \$1200 due him for his salary. JNO. H.

LETTERS

A NEW ZEALAND STORE ARRANGEMENT.

To the Editors:

In the BULLETIN for April, 1912, on page 146, I notice a druggist photographed in his store—Mr. William Bodemann of Chicago.

Well, looking at the interior, it did not strike me as having a particularly smart arrangement. The containers were apparently two or three deep and therefore an impediment to quick dispensing.

I submit an interior view of my dispensing room. I've been established here seven months and have had plenty to do in rearranging the "pickle" left by my predecessor, who evidently thought dirt and grease admirable adjuncts in the pharmacy. Dirt of any sort is a horror to me. My arrangement in back of the dispensing screen now makes for quick work and quick cleaning.

Looking at the photograph, the two top shelves in the center have not yet been rehabilitated, although cleaned. One object is symmetry of arrangement. When I started to set out the screen, the shelves were so far apart as to lose much space. So I set to work and

put in shelves at the top of the 10-ounce bottles, not quite half the width of main shelves. On these I put my small bottles, which are always in the way if they stand on the same shelf as the larger bottles.

The counter I keep clear of all containers,



A view of Mr. King's dispensing room.

only scales being in evidence. On the section alongside the scales I set each container used in making up prescriptions so that the ingredients may be checked and the bottles then restored to their proper places.

Pahiatua, New Zealand. RALPH V. KING.

THREE GOOD SIDE-LINES.

To the Editors:

Druggists have to spread into side-lines. I find that souvenir post-cards pay very well, better than anything else in the store. You can take local pictures yourself and have them made up into photographic cards. These sell very well. Besides we have birthday and holiday cards. I buy cards in quantity, and they net me from 100 to 500 per cent profit. One must have as big a variety as possible and select subjects that are more or less seasonable the year round.

Graphophones are also very profitable, particularly in the fall and winter. Every one loves music. If you have a good line of records, people will listen to the pieces you play for your own pastime, and this often leads to the sale of a graphophone. I was surprised at the number I sold in two months. The first cost is small considering that it means a customer for new records each month. This line pays very well—about 40 per cent.

Then in the summer I handle fishing tackle. Every fisherman knows that when he starts to buy there is no end. Fishing tackle pays very well—from 100 to 1000 per cent. Make an attractive window with everything used in fishing, and you can sell every fisherman an outfit. Offer a prize for the biggest catch or biggest fish caught and brought to your store, and you will have success in the sale of fishing tackle.

E. E. SCHAEFER.

Fairport Harbor, Ohio.

A PUZZLER DECIPHERED.

To the Editors:

The July BULLETIN has come to hand and is thoroughly alive and interesting. I have examined the badly written order on page 298. Really, it is not nearly so badly written as badly spelled:

20 cts worth of Bastary Camphor
20 cts worth oil of Helbert
20 cts worth oil of soneril wood
20 cts worth of Sweet Spirits Nitre
10 cts worth of Sulfuric Zinc
10 cts worth of Sugar of Plavey
Caster \$ 100,
Under fill this order read Careful

We would have filled it as follows:

- 20 cents worth of balsam copaiba.
- 20 cents worth of oil of cubeb.
- 20 cents worth of oil of sandalwood.
- 20 cents worth of sweet spirit of nitre.
- 10 cents worth of sulphate of zinc.
- 10 cents worth of sugar of lead.

Cost, \$1.00.

Please fill this order. Read carefully.

In our experience we have filled many more difficult orders than the foregoing. This combination is one in which several ingredients are suggested by the one or two which are easily read. The real puzzlers are those orders calling for one or more articles not connected by similar uses. We have received such orders as follows, all badly spelled and looking much worse than when we reproduce them in print:

- 1 oz. Pantasote for babby.
- One half ounce of pulse of tello.

Somerset, Ohio.

BAILEY & FINCK.

[NOTE BY THE EDITORS.—Among others who deciphered this prescription are the Hahman Drug Company of

Santa Rosa, Cal., and F. Loughran of Fishkill-on-Hudson, New York. For reasons of space, we are unable to publish their letters in addition to the foregoing.]

A POINT OF ETIQUETTE.

To the Editors:

In your department of "Business Hints," on page 302 of the July BULLETIN, is an article by L. C. Wareham borrowed from *The Pill*, showing very forcibly the advisability of avoiding the expression "Is that all?" in talking to a customer. In our store all are instructed to ask a customer either, "Is there anything else you think of?" or "Do you have anything else in mind?" Either of these questions usually sets the customer to thinking, and in most instances proves worth while.

Pottstown, Pa.

E. E. WILKINS.

A FRIEND FOR 14 YEARS!

To the Editors:

As for me I take pleasure in saying that I have read the BULLETIN for the past fourteen years and have eleven or twelve years' volumes in bound form. The latter I use constantly as reference books and general drug-store helps. Your formulas are a great help in making individual items, while your department of "Profits and Earnings" shows that most of us fail to get the good sound business system in the drug business that is necessary in any mercantile line of its magnitude and complications. Thanking you for your good service, I beg to remain,

O. MITCHELL.

Pecos, Texas.

STATIONERY A GOOD SIDE-LINE.

To the Editors:

My best paying side-line is stationery. I try to keep a clean stock, which includes tablets and envelopes to match, box papeteries, bulk paper, and invitation notes.

We carry a small lot of cheap papers, but the bulk of the stock is in the better goods, selling for 50 and 75 cents. These are our most staple sellers, as are the 10- and 25-cent tablets. Our best customers are women.

We often have samples of talcum powder, perfumes, and toilet preparations, which we hand out while making a stationery sale and thereby gain patronage on these articles also.

Audubon, Iowa.

D. A. FRICK.

A VETERINARY MIXTURE.

To the Editors:

On page 531 of the August BULLETIN, in the department of Queries (which, by the way, I think one of the best features of the BULLETIN), I notice the inquiry of W. H. B. about a veterinary mixture:

Mercury,
Nitric acid,
Oil of cedar,
Tincture of cantharides, equal parts.

I believe this is similar to one we put up a great deal. We use powdered cantharides instead of the tincture, and we add a small amount of vaselin. We dissolve the mercury in the acid, add the oil of cedar to the powdered cantharides, use a little vaselin, and mix. If the acid solution is still hot, the mixture will swell.

RALPH E. GRAY, Ph.G.

Effingham, Kansas.

"BLACK AND TAN!"

To the Editors:

Here is something new in the way of a let-

*Dear Sir -
To day hapen brok my medicine bottles
and I am out of every drop. Also I do
not know the N^o of them bottle which already
been brok in case that I wish to send
for filled again, but I would please you
to look over the matter, in your own book
for a Prescription which was written by Dr. Silver
for Mr. Mat Hjerich I would be glad to soon
send me a book medicine black, & Tan - if ever
you can
Respectfully*

ter or order from a customer. What do you know about "black and tan" for a remedy?

Oakland, California.

CARSON ANGEL.

QUASSIA CHIPS OR POKER CHIPS?

To the Editors:

In the July BULLETIN I noticed in Brother Farrington's article that he had at one time in his experience had a call for "poker chips for lice on cattle," but he says he never found out what the customer wanted. I think he would have been safe in supplying "quassia chips," as I have calls for them for that purpose. Customers sometimes pronounce the name so one would think they were calling for "poker chips."

G. E. BRASINGTON.

Maiden Rock, Wis.

A QUESTION OF PRICE.

To the Editors:

The following prescription was filled by my predecessor for 35 cents. I charged 45 cents, and the customer, being very much displeased, claimed that several druggists had said a quarter was a good price for it:

Sulphonah 1 drachm.

Divide into five powders.

I would like very much to have the opinion of other druggists about this price.

Detroit, Mich.

R. E. DALES.

[NOTE BY THE EDITORS.—We should like to have our readers express themselves on the price of this prescription.]

IN HARD STRAITS!

To the Editors:

A negro came into the store a few days ago to buy a hot-water bottle for another negro who was ruptured. He said, "I wants dis fo' a nigger out heah. He's corrupted and the corruption is done come down on him!"

Klondike, Texas.

BENTON JONES,
Mgr., Klondike Pharmacy.

To the Editors:

Enclosed find check for another year's subscription to the BULLETIN. May it continue to show a marked advance in pharmaceutical journalism considerably ahead of similar publications!

R. H. NEEDHAM, Ph.C.

Fort Worth, Texas.

* * *

To the Editors:

Cannot afford to be without the BULLETIN. It becomes more interesting every year.

Pasadena, Cal.

THOS. M. JAMES.

* * *

To the Editors:

We think the BULLETIN is the best paper on earth and cannot get along without it.

Ord, Nebraska.

BERANCK BROS.

* * *

To the Editors:

We consider it impossible to run a drug store without the BULLETIN OF PHARMACY.

THE STRONG DRUG CO., LTD.

Haileybury, Ont.

THE SODA FOUNTAIN.

SOME PLAIN SYRUPS.

How to make good simple syrup: Take 7 gallons of water, add 50 pounds of sugar, and stir with a paddle until the sugar is dissolved. It requires but two or three minutes to do this, and it is a much more satisfactory method than to use a percolator—you get the benefit of every grain of sugar. This will give 10 gallons of simple syrup at a cost of 30 cents a gallon, figuring sugar at six cents a pound. One of the reasons why simple syrup should not be made heavier is that a light syrup brings out the fruit flavors; for instance, in orange syrup. Almost every soda dispenser, who takes any interest in his work, has overheard this remark from the customers:

"The sodas at this fountain would be all right if they were not so sweet."

An orange or any other phosphate or plain drink should have a delicious fruit flavor, but what do you get in most places? The sole trouble lies with the simple syrup. Suppose you put four lumps of sugar into your cup of coffee. What will be the result? You will have a sickishly sweet coffee, which very few people will like. Put only two lumps in the coffee and you have a delicious cup of coffee in which the flavor of the bean predominates. Same here—if the syrup is made as above stated, you serve an elegant orange phosphate, with a very fine fruit flavor, and it will not be too sweet. The same is true of all the other flavors.

Before using this simple syrup it should always be run through a very fine straining cloth, and care should be taken that the tank is cleaned out whenever empty.

To make a perfect lemonade, powdered sugar may be used to advantage. Room and time may not allow this, in which case a simple syrup may be made—10 pounds of sugar to one gallon of water—and substituted.

Many soda-fountain operators pay very little attention to simple syrup, but judging from my own experience it is of very great importance in the manufacture of good syrups.

CHOCOLATE SYRUP.

Chocolate syrup is a most important factor at the soda fountain. It is called for more than any other flavor, and the popularity of the fountain depends to a great extent on whether the chocolate syrup is good or indifferent. First of all in making chocolate syrup a good cocoa must be employed. I do not care to advertise any of the many brands of this article, but there are a number of good ones on the market. I generally use two different brands, half and half. The mixture stands me about 35 cents to the pound.

There are various ways of making chocolate syrup, of which the following seems to me, for many reasons, to be the best:

Take the cocoa and mix as much as possible with the sugar. Put the mixture into the boiling water and let it come to a good boil. Do not turn off the gas when it comes up, but allow to boil for two or three minutes. In fact, give the mixture a thorough "boil," otherwise you will be wondering why the people don't like your

chocolate, even if you use the very best ingredients. Doesn't a ripe apple taste better than a green one?

A very good formula is the following:

One pound of cocoa, six pounds of sugar, and one gallon of water. This will make about $1\frac{1}{2}$ gallons of syrup at a cost of 53 cents a gallon, figuring cocoa at 35 cents and sugar at six cents a pound. If you use two ounces of this to a soda, it will cost about one cent, and you have a very good syrup for reasonable money. Some dispensers also add a little vanilla extract, which will make it more expensive, and rather spoil the whole—some chocolate flavor.

If possible this syrup should be kept in bottles, but where much of it is used cans may be employed to advantage. It should never be used until at least twenty-four hours old and thoroughly cooled. It will keep better in an ice-box than in any other place. The tanks or bottles on the fountain for chocolate syrup should be washed out every night before closing. This will keep the chocolate syrup fresh and clean. Finally, be sure the syrup is strained well before it reaches the fountain.

For sundaes you can make this same syrup double strength, making it a point, of course, to see that it is poured on the cream ice cold.

VANILLA SYRUP.

Vanilla syrup also has a big "call," and nothing but the best vanilla extract should be used. In the end it is the most inexpensive of all. Supposing you pay \$9 a gallon for a good vanilla extract. How much does a gallon of vanilla syrup stand you? If you use one ounce of vanilla, which will cost 14 cents, and one gallon of simple syrup at 30 cents, it will cost just 44 cents for a gallon or 128 ounces. Two ounces of this will cost less than one cent.

If you use a cheap vanilla you only hurt your own business! Enough profit can be made on a good one. A good vanilla will not require coloring.

COFFEE SYRUP.

To make a coffee syrup take one pound of good coffee, place in a percolator, and add a pint of cold water. Let stand for about five hours, then add $2\frac{1}{2}$ gallons of boiling water and again let stand for from six to twelve hours. Drain off the percolate and add from $2\frac{1}{2}$ to $3\frac{1}{2}$ pounds of sugar, warming a little in order to dissolve the sugar. Strain and allow to cool before using. This process will make about three quarts of syrup at a cost of 44 cents or 60 cents a gallon.

Another method which I have employed very successfully is as follows:

Take three ounces of prepared coffee, which dissolves instantly in either cold or hot water, three quarts of water, and from $3\frac{1}{2}$ to $4\frac{1}{2}$ pounds of sugar. Mix the coffee first with one quart of cold water, then add two quarts more of water and sugar and stir until the sugar is dissolved.

The above has met with great success at our fountain, and more of it is sold every day.

In order to have good syrups close attention must be paid to them. Tanks and bottles should be kept clean, syrups kept fresh, and old syrups should never be mixed with the new. If you are the proprietor, you will naturally look out for your own interest, but if you are a soda dispenser, see that the boss makes a little money.

Anybody can make good syrups, etc., for big money, but the question is to make good syrups at the smallest cost compatible with real economy.—*The Soda Fountain*.

HOT WEATHER HINTS.

Just at this time of the year your fountain business is at its height, and if the drinks and sundaes you have been serving have given you any kind of a reputation you are making money. Just now every one wants something cool and refreshing, and as a result the rush is on. Every one is working hard, and the tendency is to become negligent and think that anything will do. It is so easy to try to rush things through, to stretch things just a little more so as to save time. For example, perhaps you have been using a dozen lemons to make a gallon of lemon syrup; being rushed you use only eight. The result is the syrup is not as good as usual; but you argue that it is hot weather and that it will pass because people will drink anyway in this kind of weather. Now in a sense this is true, the public will put up with your neglect because it is hot, and they want something cold to drink; but it is having an adverse effect upon your reputation all this time, for while they may eat and drink your product, they are not satisfied. They may not say anything. The dispenser excuses the soft ice cream that he puts in the glass of soda water by saying that it has just been frozen; we sold all out yesterday. Any one is willing to take this explanation once or twice, but when they hear it every day or two they think, and rightly, that you are neglectful.

To keep people coming to your fountain is to satisfy them when they do come. They are coming now in crowds. You can have everything right and fresh. There is no excuse for having old syrups. You say "we can't do things as well as we do when we are not busy, because we are rushed and every one is working overtime to turn out enough syrup, etc., to supply the demand." That is just where the trouble lies; so many confectioners and other dispensers of soda water, by the way, are just as bad—never think of hiring extra help so that things can be properly managed at this season. An extra man, even a boy at eight or ten dollars a week, will be a big help in keeping things up to your standard. If there is ever a time when good service counts, it is at this season of the year. It's a bad habit to let the boys become careless in the busy season.

There is no season of the year when your fountain can make as many friends as it can in the summer. There is a good reason for this; more people come to it then than at any other time. If the fall of the year does not find you with more regular customers coming to your fountain than you had in the spring, then the season has been a failure, no matter how much money you have put into the bank. Making money is a good thing, that's what we are in business for; but one must look beyond to-day into the future. There are other seasons coming. If you do things just as they should be done you may make a little less this year; but you will make more next season, and so on. It is better to begin with a little and grow than with much, and each year find that you are doing less as the years go by.—*The International Confectioner*.

SODA WATER WINDOW DISPLAYS.

EGG DRINK WINDOW.

An especially effective show can be arranged by banking the back and floor of the window with clean wheat straw, the back sheaves held erect in place by Alice blue ribbons, which color is most effective with the yellow straw. Leave several nests of the straw and fill with large white Leghorn eggs. Make several imitation egg drinks by filling the body of the glass with yellow jewelers' cotton and the top with white cotton to represent froth. Stand these dummy drinks on small boxes covered with straw, and on the floor between these place a number of small Japanese chickens. Perch a small crowing rooster on the rim of the central glass and hang up a good-sized sign, "There are no chickens in our egg drinks." There is no exhibit that attracts as much attention as a live exhibit, and if you can get a few new-hatched downy little chicks to run about in the show window it will be much more effective.

CHOCOLATE WINDOW.

Get from your principal chocolate man some chocolate pods showing the way the bean grows. Suspend these by red ribbons from the top of the window. Get some of the cocoa beans, both raw and roasted, also some of the shells, then the cracked beans before grinding; a cake of chocolate, and finally the finished cocoa, and a cake or two of cacao butter, the by-product in the process of manufacturing cocoa. Spill all these things in neat piles on a red plush or sateen covering on the window floor. Tag each pile with a neat descriptive sign and bank the back of the window with red fall foliage, and you have a window that every one will admire and remember. On a pedestal in the center place a glass three-fourths filled with brown jewelers' cotton and one-fourth white cotton, and an attractive sign with brown lettering, "The way our chocolate soda is made and why it is so good."

THE VANILLA WINDOW.

A vanilla window can be arranged in the same way, showing the whole and ground beans, the sugar, and the extract.

GRAPE JUICE WINDOW.

A corking good idea appeared in a window in Boston. The window was dressed with imitation grapevines, on which were tied with green-covered millinery wire a number of bunches of grapes. In the center of the window were a small cider press and a stool. Twice a day a young lady dressed in white went into the window, cut off the bunches of grapes, picked the grapes from the stem into the cloth of the press, and pressed the juice out. This operation took about three hours, as it was conducted slowly, and then the window was covered in order to tie on more grapes. There was a large sign, "This is the way we prepare our grape juice at our fountain. Try it. Also for sale in bottles."

CIDER WINDOW.

A fresh cider window can be arranged and worked in the same way, using imitation apple branches and apples instead of grapes, and adding to the equipment a small apple grinder.—*Confectioners' Journal*.

BOOKS

"FRESH AIR AND HOW TO USE IT." By Thomas Spees Carrington, M.D., New York, the National Association for the Study and Prevention of Tuberculosis, 105 East 22d Street; 250 pp.; 150 illustrations; Cloth; Price, \$1.00 post-paid.

Although fresh air is the most fundamental of all the necessities of life, few people know how to use this free gift to the best interests of their own health and that of those with whom they live and work. Dr. Carrington aims in his book to show how an abundance of fresh air is within the reach of every one, whether he be a millionaire owner of a country house, or a dweller in a city tenement. Probably no more complete compendium of information on how to get fresh air in the home at all times has ever been published.

The aim of the book is not primarily to suggest methods of treating disease in the open air, though it is published by the National Association for the Study and Prevention of Tuberculosis. It is rather a handbook for every one who wishes to ward off disease in his own body and in those of the other members of his family.

Dr. Carrington's method of treating the subject is practical. He aims to be so concise that any one may be able to follow out his instructions in securing or making the devices of which he speaks. Some of the topics which he discusses are window tents, home-made and manufactured; roof bungalows, with suggestions for building; temporary fresh-air porches for country use; wall houses and iron frame porches for city use; tents and tent houses; open air bungalows and cottages; roof playgrounds for children; and clothing, bedding, and furniture necessary for outdoor living and sleeping.

The book contains 150 illustrations, including floor plans and working drawings. It is published as cheaply as possible by the National Association for the Study and Prevention of Tuberculosis as part of its campaign for the prevention of disease.

IBSEN AS A DRUGGIST.

"Shortly before his sixteenth birthday, Ibsen was apprenticed to an apothecary by the name of Reimann, at the little town of Grimstad, between Arendal and Christiansand, on the extreme southeast corner of the Norwegian coast. This was his home for more than five years; here he became a poet, and here the peculiar color and tone of his temperament were developed. So far as the genius of a very great man is influenced by his surroundings, and by his physical condition in those surroundings, it was the atmosphere of Grimstad and of its drug store which molded the character of Ibsen. Skien and his father's house dropped from him like an old suit of clothes. He left his parents, whom he scarcely knew, the town which he hated, the school-mates and schoolmasters to whom he seemed a surly dunce. We find him next with an apron round his middle and a pestle in his hand, pounding drugs in a little apothecary shop in Grimstad. What *Blackwood's* so basely insinuated of Keats—"Back to the shop, Mr. John—stick to plasters, pills and ointment boxes"—

inappropriate to the author of *Endymion*, was strictly true of the author of *Peer Gynt*."—"The Life of Henrik Ibsen," by Edmund Gosse.

"An Essay on Hasheesh," written by Victor Robinson, has just been printed in cloth by the Medical Review of Reviews, 206 Broadway, New York City. It is a little book of 83 pages, and the price is 50 cents. The history of cannabis and its employment is first given, and then a somewhat dramatic and picturesque account is presented of the results following the administration of the drug to the author himself and to a friend.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Pungent Paragraphs.—

The green flame which surrounds an arc light is said to be due to a reaction between nitrogen oxides and ozone, induced by the electrical conditions.

The gasoline engine demands conditions of lubrication which castor oil can best fulfil, and only a good grade of the oil is suitable for this purpose.

An improved method of clarifying olive oil consists in mixing the crude oil with a solution of sodium chloride, and after some time separating in centrifugals. Oil so treated is lighter in color and purer than that obtained by older methods.

To preserve solutions of apomorphine hydrochloride Corbelli recommends to add one per cent of hypophosphorous acid. This preserves the activity for at least one year, although the color changes.

Pure water will dissolve small amounts of iron, zinc, copper, tin, nickel, and lead, forming colloidal solutions of these metals. These solutions are easily precipitated by electrolytes, and are not formed in waters containing such.

Italian chemists have obtained evidence that sodium salicylate and caffeine combine to form compounds of definite character. The work is not yet finished, but will soon show whether the pharmaceutical product is a compound or only a mixture.

The International Committee on Weights and Measures recommends that standard weights for laboratories be made of tantalum. It resists all acids except hydrofluoric, and is sufficiently hard and permanent for standards.

Sunlight is rich enough at the earth's surface in ultraviolet rays to decompose water into hydrogen and hydrogen peroxide.

Digestion depends upon the presence of inorganic salts as well as upon enzymes. If gastric or pancreatic juice be dialyzed, the enzyme loses its power, but on the addition of salts the activity is restored.

An Italian chemist says that tomatoes are a good remedy for diarrhea. They are frequently supposed to have an opposite action.

Tincture of iodine applied externally is said to prevent the coloring of the urine by methylene blue, taken internally.

Eloire, a French chemist, claims that it is impossible

to recognize with certainty an addition to butter of less than 30 per cent of oleomargarine.

Phosphoric acid is stated to modify nutrition to an extent to be objectionable in acid drinks. It acts quite differently from citric or tartaric acids on the system.

Water can exist in the solid form in five allotropic conditions, all of which except ordinary ice are heavier than water.

T. H. Laby figures that if the interior of the earth contains as much radium as the surface rocks, the temperature of the earth should now be 14,000° instead of what it is.

Neon lamps, in which neon is rendered incandescent by an electric current, promise to be the most economical form of lighting. They give an orange-colored light which is useless for matching colors.

Chemical light rays have an injurious effect on all enzymes, though in varying degrees. Emulsin is easily destroyed, while rennet is quite resistant. The action is due in part to the formation of hydrogen peroxide by the rays.

Schumburg says that the bacteria-destroying power of absolute alcohol is as great as a 1:1000 solution of mercuric chloride. A 70-per-cent alcohol is more effective because it causes less coagulation.

If cumarin be introduced into the soil, it causes distortion of the leaves of the plant growing therein. Vanillin inhibits root-growth and benzoquinone produces tall, slender plants.

Siloxide, a solution of titanium or zirconium oxide in quartz, makes an extremely resistant form of glass which is valuable for chemical uses. It resists the action of hot alkalis as well as of acids and does not break or bend easily with heat. It is being manufactured in Germany.

Lobster shells are found to contain alizarin, and when boiled this forms a red "lake" similar to "Turkey-red," which is the cause of the change in color when lobsters are boiled.

Arsenic Externally.—

Dr. Washburn states that arsenic acid has a stimulating action on the skin, due partially to its being reduced to arsenous acid and liberating free oxygen. When the action is slow and in moderate quantity, the growth of hair and epithelium is stimulated, but if too rapid or too long continued the nutritive processes of the cells are hurried beyond endurance, and exhaustion and finally death of the tissues follow. He warns against the indiscriminate use of arsenic.

Infusion of Digitalis.—

A. Hoger claims that none of the preparations of digitalis is as efficacious as the infusion because none other contains all of the active principles of the leaf. The infusion does not keep well, which is its greatest objection, but the addition of 5 to 15 per cent of alcohol remedies this. Five per cent of alcohol will preserve it ten to thirty days, and 15 per cent will preserve it indefinitely.

A Lawn Dressing.—

J. W. Tayleur gives the following formula for a lawn sand: Sand 67 pounds, sulphate of ammonia 7 pounds, nitrate of soda 7 pounds, superphosphate 21 pounds, sulphate of potassium 7 pounds, sulphate of iron 3 pounds. Apply in the spring at the rate of 5 pounds to 40 square yards of lawn. The sulphate of iron weakens or kills dandelions, and the sulphate of ammonium is harmful to plantain, both being harmless to grass.

Gout is Expensive.—

Radium emanations decompose uric acid and urates into ammonia and carbon dioxide. This explains the action of certain thermal springs on gouty patients, and also the influence of radium treatments on such patients. The uric acid is first rendered soluble, and may be eliminated before being decomposed.



A GROUP OF MICHIGAN TRAVELERS.—These are some of the members of the Michigan Pharmaceutical Travelers' Association, snapped at the Muskegon meeting last month. This is the meeting where the Michigan State Pharmaceutical Association and the Michigan Retail Druggists' Association amalgamated to form a new body under the title of the first-named organization. The president of the Travelers' Association is F. W. Kerr, Detroit, Mich., and the secretary-treasurer is W. S. Lawton, Dr. Miles Medical Company, Elkhart, Indiana.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Phosphorus Rat Pastes.

J. W. L.—There are many stupid formulas for phosphorus paste, yet there is, perhaps, nothing so easy to make as an active and fatal paste with the phosphorus in a practically unoxidized state. The points to note are that phosphorus readily dissolves in hot fats (1-20 or more), and that the poison should not be present in such excessive quantity as to drive away the vermin.

- (1) Phosphorus1 drachm.
Beef dripping.....5 ounces.
Wheat-flour2 ounces.
Sugar1 ounce.
Powdered biscuit1 ounce.
Watera sufficiency.

Melt the dripping and put it into a wide-mouth bottle, placed in a pan of hot water. Drop in the phosphorus (cut small), cork, and shake the bottle until the phosphorus is dissolved (dipping into the hot water occasionally). Place the powders in a warm mortar and pour the phosphorized dripping upon them, mix, and add warm water to make a soft paste.

- (2) Phosphorus1 drachm.
Pure carbon bisulphide.....½ ounce.
Beef dripping5 ounces.
Comp. tragacanth powder.....½ ounce.
Oil of anise.....10 drops.
Oil of peppermint.....5 drops.
Boiling water.....3 ounces.

Heat the dripping until it is quite clear, and transfer to a hot mortar; pour into this the carbon bisulphide in which the phosphorus has been dissolved; stir, then add the two powders and the oils, and finally the boiling water all at once, kneading the mass thoroughly until a perfect mixture is obtained.

These are practically alike, but by dissolving the phosphorus in the carbon bisulphide the paste is made much more quickly. The carbon bisulphide must be the redistilled or odorless variety. Most of the bisulphide is dissipated by the hot water, and, as the solvent evaporates, access of air, therefore oxidation of phosphorus, is prevented. Another good way to make the paste is to melt lard in a wide-mouth bottle in a water-bath; introduce into it ½ ounce of phosphorus for every pound of lard; then add a pint of proof spirit; cork the bottle firmly, keeping the contents heated to 150° F., and agitate smartly until the phosphorus becomes uniformly diffused, forming a milky-looking liquid. This liquid on cooling affords a white compound of phosphorus and lard, from which the spirit spontaneously separates, and may be poured off to be used again, as it only serves to diffuse the phosphorus in very fine particles through the lard. This phosphorized lard, on being warmed very gently, may be poured into a mixture of its own weight of barley or wheaten meal and sugar, incorporated therewith, and after flavoring with oil of rhodium, etc., the dough may be made into pellets for distribution to the mice. Or mix the lard with powdered cheese (3 to 1), to be spread on bread.

Two Queries.

N. S. wants to know what he can do with syrup of wild cherry which on standing has turned sour and shows fermentation. He also asks how the following prescription may be dispensed:

Carbolic acid.....1 minim.
Guaiacol carbonate.....7½ grains.

Mix and make 25 capsules.

This formed a semi-liquid, and when N. S. tried to liquefy it entirely in a test-tube by the application of heat, and then waited until it was sufficiently cool to pour into the capsules, it solidified entirely.

From the text of our querist's letter it is not plain to us whether he wants to recover some syrup of wild cherry which has spoiled, or whether he wants to know how to prevent future lots from going wrong. If the former, there is no help for it—throw the stuff in the sink. If the latter, we might suggest a few don'ts:

Don't keep this syrup in a warm place in summer.

Don't mix an old lot of syrup with a new lot.

Don't fill the stock bottles, from which you have just emptied the last of the old lot, with the new syrup until the bottle has been thoroughly washed with hot water. The presence of a very small amount of badly fermented syrup is sufficient to ruin the most carefully made preparation in a very short time.

Don't cut down the amount of sugar, for thin syrups afford excellent media for the growth of microscopic organisms.

Don't use heat to dissolve the sugar.

Don't, under any circumstances, forget to add the glycerin to the receiving vessel.

As for the prescription of capsules, this can be prepared by mixing the guaiacol carbonate with one and a half times its weight of milk sugar and then adding the carbolic acid, which has been previously liquefied by warming. Do not, however, use a liquefied acid containing any added substance such as glycerin or water.

Regarding Concentrated Solution of Hydriodic Acid.

"Druggist" writes as follows: "I have in stock a bottle of concentrated solution of hydriodic acid. Some time ago I used part of it, and shortly after when I again looked at the bottle I noticed it had turned a dark orange color. I took it off the shelf, opened it, and could smell the free iodine. Thinking it unfit for further use, I placed it off in the corner of the prescription case, intending to more thoroughly investigate it when I had some spare time. After several days, when I again looked at it, I was surprised to see that its contents were now a light straw color with no trace of free iodine. I placed the bottle back on the shelf where I originally kept it. This is near a window where the light strikes it during the day. I did this to see whether the light would again turn it dark, but after several weeks and at the present time I find that it is perfectly colorless and clear. Do you think it is O. K. and all right to use for preparing syrup hydriodic acid?"

Concentrated solution of hydriodic acid is readily decomposed by sunlight with a liberation of iodine. It is necessary to preserve it with hypophosphorous acid, which reacts with the iodine present and again converts it to hydriodic acid, thus keeping the solution practically colorless. We are unable to explain the coloration of this sample, however, unless it had stood in direct

sunlight, which would decompose it faster than the hypophosphorous acid would decolorize it. After standing in the dark cupboard for a few days the hypophosphorous acid may again have caught up with its work. We would not hesitate to recommend that the solution is entirely fit for the preparation of syrup of hydriodic acid.

Toilet Lotion.

H. B. S. writes: "Please publish the formula of a pure white cream lotion for the hands and face. A liquid preparation of a non-greasy order is preferable."

On page 125 of the March BULLETIN, 1911, appeared the following formula by R. L. Dixon:

Quince seed	2 ounces.
Boracic acid	1 ounce.
Rose-water	8 ounces.
Distilled extract of witch-hazel.....	8 ounces.
Glycerin	8 ounces.
Alcohol	8 ounces.
Tincture of benzoin.....	1 ounce.
Oil of rose.....	20 minims.
Carbolic acid	20 minims.
Water, enough to make.....	1 gallon.

Place the quince seed in a gallon bottle, add the water and let stand 24 hours, shaking occasionally. Strain through muslin. Dissolve the carbolic and boric acids in the glycerin with the aid of gentle heat. With this mix the tincture of benzoin, and add this mixture in several portions to the quince-seed mucilage, agitating the bottle well after each addition. Finally add the oil of rose dissolved in the alcohol, and mix the whole well.

This makes a nice, creamy, non-sticky preparation. It is put up in 3-ounce bottles and retails at 25 cents. Wash the quince seed well before macerating.

Commenting on the foregoing formula, on page 213 of the May BULLETIN, 1911, D. A. Frick said: "I have prepared a toilet lotion of quince seed, witch-hazel, etc., very similar to the formula given by R. L. Dixon, and have enjoyed a nice sale on it for several years. I color it violet and use a violet-trimmed label, naming the preparation 'Violet Cream Lotion.'"

Some Business Questions.

W. M. C. writes us the following letter: "How much net profit should be realized from an investment of \$6800 and an annual business of \$14,000? The expense is about \$3000, equaling approximately 22 per cent. Can a business be done with this small expense? Please let me know what you think about these figures in general."

An expense of 22 per cent for a \$14,000 business is rather below the average, although it is entirely possible. It should be known definitely, however, whether the proprietor's salary has been added, as it should be, to the expense column. The salary in a business of this size would be something like \$1200 or \$1500, and it would seem to us that the remaining portion of the total expense of \$3000 would scarcely be sufficient to run the business. We are therefore inclined to think that the element of proprietor's salary has not been taken into consideration, and the fact ought to be known definitely. As to how much net profit should be realized from the business we may reply that the average profit is about 10 per cent, meaning \$1400 in this case. Adding to this amount the proprietor's salary of \$1200 or \$1500, we have total earnings from the business ranging between \$2500 and \$3000. This is as much as could be expected on the average, although in some instances shrewd managers are able to jack up their net profits to 12 or 14 per cent.

Shoe Polishes.

L.'s Pharmacy.—The following, borrowed from Henley's Book of Recipes, evidently result in liquid polishes or cleaners:

- (1) Yellow wax 4 ounces.
Pearlash 4 drachms.
Yellow soap 1 drachm.
Spirit of turpentine..... 7 ounces.
Phosphine (aniline) 4 grains.
Alcohol 4 drachms.
Water, a sufficient quantity.

Scrape the wax fine and add it, together with the ash and soap, to 12 ounces of water. Boil all together until a smooth, creamy mass is obtained; remove the heat and add the turpentine and the aniline (previously dissolved in the alcohol). Mix thoroughly, and add sufficient water to bring the finished product up to 1½ pints.

- (2) Water 18 parts.
Rosin oil 4½ parts.
Spirit of sal ammoniac, concentrated..... 1.5 parts.
White grain soap..... 1.93 parts.
Russian glue 1.59 parts.
Brown rock candy..... 0.57 part.
Bismarck brown 0.07 part.

Boil all the ingredients together, excepting the pigment; after all has been dissolved, add the Bismarck brown and filter. The dressing is applied with a sponge.

These are for tan and russet shoes. For a black polish you might color with some such dye as "Frankfort Black" or Ivory Black instead of the brown dyes.

Marketing a Proprietary Preparation.

Mr. F. writes: "I have a formula for an ointment for eczema, ringworm, and all kinds of skin diseases. I have cured, to stay cured for good, in the last three years, about 75 cases. I would like to know the best way to put this product on the market."

If you desire only a local trade, push the preparation in your own store. Advertise it in your paper. Induce other druggists in the county about you to carry it, and place a stock with the home jobbers. Thus you can start in a small way and gradually expand.

If you have big ambitions, get in touch with some advertising houses that are practiced in national advertising. They know better than ourselves how to proceed. But it must be remembered that any attempt to give your preparation wide publicity will call for large expenditures. It requires capital. Plenty of fortunes have been sunk in the exploitation of patent medicines.

Hand Lotion for Farmers and Others.

J. P. M.—The formula to which you refer is probably that which appeared on page 80 of our book entitled "350 Dollar Ideas for Druggists." This is the formula of a good antiseptic skin lotion to be used on the chapped and cracked hands of laborers, farmers, mechanics, and miners. Their hands are usually so callous that the ordinary toilet creams do not soften and heal them. The following formula makes an excellent application for burns, stings, and all irritations where a cooling, healing, antiseptic lotion is indicated. It is also useful as an after-shave.

Boric acid	2 drachms.
Salicylic acid	4 drachms.
Zinc sulphocarbolate	30 grains.
Menthol	10 grains.
Spirit of camphor.....	2 fluidounces.
Glycerin	4 fluidounces.
Spirit lavender compound.....	¼ fluidounce.
Bay rum, q. s.....	16 fluidounces.

This preparation may be put up under any appropriate name in 4-ounce packages, which retail at 25 cents. This price gives the retailer a good profit and pleases the consumer.

Artificial Flavors.

A. C. W. wants a formula for two artificial flavors, strawberry and banana.

Artificial flavors are tabooed by the Federal law. Several of the States also prohibit their use. With that understanding we print the following formulas:

STRAWBERRY.

Glycerin	1/2 parts.
Nitric ether	1 part.
Ethyl acetate	5 parts.
Ethyl formiate	1 part.
Ethyl butyrate	5 parts.
Methyl salicylate	1 part.
Amyl acetate	3 parts.
Amyl butyrate	2 parts.

BANANA.

(1) Deodorized alcohol	500 parts.
Proof spirits	200 parts.
Pure banana juice	190 parts.
Banana ether	100 parts.
Tincture of vanilla	10 parts.

Color with tincture of curcuma.

(2) Acetate of amyl	1 ounce.
Valerianate of ethyl	1 drachm.
Diluted alcohol	15 ounces.
(3) Amyl acetate	4 drachms.
Alcohol	10 ounces.
Water, enough to make	16 ounces.

Some add butyric ether, which, however, is of questionable utility.

Tasteless Preparation of Cod-liver Oil Compound.

"Pharmaceutical" asks for a formula for a tasteless preparation of cod-liver oil "extract" containing fluid-extract of wild cherry, extract of malt, and hypophosphites of lime and soda, manganese, quinine, and strychnine. We suggest the following, borrowed from the second edition of the Standard Formulary:

Morrhual (or gaduol)	64 grains.
Fluidextract wild cherry	2 fluidounces.
Fluidextract licorice	3 fluidounces.
Glycerin	1 fluidounce.
Simple syrup	1 fluidounce.
Extract of malt	6 fluidounces.
Compound syrup of hypophosphites with iron and manganese	3 fluidounces.
Fullers' earth, powdered, q. s.	240 grains.
Caramel	q. s.

Mix the morrhual with the glycerin, and triturate with the fullers' earth. Add the fluidextracts, syrup, and malt, shake, let stand for a day, agitating occasionally. Filter, and to the filtrate add the syrup of hypophosphites and the caramel.

The foregoing will possibly answer the requirements if the U. S. P. syrup of hypophosphites compound be employed. It may precipitate on standing, however, and it would be advisable to reduce the quantity of syrup of hypophosphites about one-half.

To Prevent Eye-glasses from Steaming.

O. B.—The following paste has been used for this purpose:

Potassium oleate	2 ounces.
Glycerin	1 ounce.
Oil of turpentine	1 drachm.

Soft soap may be used, instead of the potassium oleate, though the results are not as satisfactory. Melt the oleate and glycerin together on a water-bath; then add the turpentine. Should the paste be too thick, it may be thinned by the addition of more glycerin.

Restoring Automobile Tires.

J. R. M. writes: "Will you please publish in your next issue a formula for a paint or some sort of a coating which applied to automobile tires makes them look like new?"

The preparations used for renovating tires vary all

the way from a quick-drying paint to a benzole solution of rubber. To the rubber solution may be added some white pigment such as lead or zinc oxide.

Cleaning Wall-paper.

O. B.—Here are three methods of cleaning wall-paper. They have appeared before in the BULLETIN:

(1) To remove all stains or marks, where people have rested their heads, from wall-papers, mix pipeclay with water to the consistency of cream, lay it on the spot, and allow it to remain until the following day, when it may be easily removed with a penknife or brush.

(2) If not very dirty, the paper of any room will be much improved by brushing it over in straight lines with a soft broom covered with a clean, soft cloth; if, however, the paper be much soiled, very stale bread is the best thing to clean it with.

(3) The following has been recommended: Mix together 1 pound each of rye flour and white flour into a dough, which is partially cooked and the crust removed. To this 1 ounce common salt and 1/2 ounce of powdered naphthaline are added, and finally 1 ounce of corn-meal and 1/2 ounce of burnt umber. The composition is formed into a mass of the proper size to be grasped in the hand, and in use should be drawn in one direction over the surface to be cleaned.

Fly Powders.

R. C. P.—We do not know the composition of the proprietary powder which you mention, but the following formulas are said to drive away flies:

(1) Powdered long pepper, 5 parts; powdered quassia, 5 parts; powdered sugar, 10 parts; alcohol, 68 per cent, 4 parts. Mix the powders, moisten with the alcohol, dry, and powder again. Keep well stoppered. For use, a little is placed in a saucer and set where the flies are most abundant.

(2) Eucalyptol, 1 part; powdered orris root, 4 parts; powdered starch, 15 parts. Dispense in sprinkler-top tin boxes.

(3) Eucalyptol, 5 parts; chalk, 10 parts; starch, 85 parts. Mix. To use, cover the hands, head, and other exposed parts. The flies will not come near them.

Hot Water Removes Mucilage.

E. O. S. is in trouble. He writes: "Some time ago I pasted a display on my plate-glass window with mucilage. When I tried to remove the display the adhesive would not come off. Will you kindly tell me what will remove it without injury to the window?"

Try warm water. Mucilage is made with gum and should be water soluble. You might add a little ammonia water or sodium carbonate to the water used for cleansing.

Dyeing Shaving Brushes.

E. D. Co.—This subject is rather outside of our scope, and we could only theorize about it in a way which wouldn't serve any practical use. We suggest that you address your inquiry to some such source as the *Scientific American*, which is published in New York City.

A Book Wanted.

H. R. C.—"Food and Drug Adulteration" is a book written by Dr. Harvey W. Wiley. The publishers are P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, and the price is \$4.00 net.

Journals on the Wool Industry.

L. C. S.—Two journals devoted to the wool industry are: "The American Sheep-Breeder and Wool-Grower," Chicago, Ill., and the "Angora Goat-Breeders' Journal," Portland, Oregon.

E. D. Co.—We are unfortunately not able to give you a formula for the proprietary preparation mentioned.

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THE MONTH'S HISTORY

OWNERSHIP OF STORES BY LAYMEN.

A paper read by George C. Diekman before the New York State Pharmaceutical Association deserves more than passing attention. Dr. Diekman is both a member of the faculty of the New York College of Pharmacy and a member of the State Board of Pharmacy. In the latter capacity he has for years been brought closely in contact with the operation and enforcement of the pharmacy law, and in this particular paper he declared that the act had one serious defect. It did not preclude the ownership of a pharmacy by an unlicensed person, firm or corporation, provided such pharmacy be conducted in accordance with the provisions of the act.

This loophole, declared Dr. Diekman, had been taken advantage of by several classes of persons: first, by those who wanted to invest

capital in a business which they thought very profitable; secondly, by others to provide a source of income for persons attending pharmacy schools; thirdly, by still others from motives of spite and revenge; and fourthly, by owners of buildings or their agents seeking a tenant for a vacant store. For one reason and another, therefore, a considerable number of stores have been established throughout the State which are not under the ownership and proper supervision of registered pharmacists, and which are really being conducted contrary to the plain intent of the law, and likewise contrary to the public welfare.

* * *

IS THERE A REMEDY?

Now what is the remedy? Professor Diekman declared frankly that he did not know.

He rather leaned, however, toward the Massachusetts law which actually makes it a punishable offense for any one not a registered pharmacist to own or be actively engaged in the business of pharmacy, except that the widow, executor, or administrator of a deceased owner of a store may continue the business under the care of a registered pharmacist. He thinks it quite likely that such a law would be held unconstitutional; "but surely," he adds, "when a practice is so manifestly wrong in principle as the one under discussion is, and when it is at the same time manifestly detrimental to the best public policy and interest, there must be found some remedy which will make it impossible that such conditions any longer exist."

For ourselves, we are afraid that such a law surely would, if ever submitted to the test of court interpretation, be declared contrary to the fundamental constitution. Our understanding is that you cannot limit the ownership of property by law. If a man wants to invest in a drug store he has quite as much right to do it as he has to invest in railroad stocks or government bonds. The law can declare that a given type of business must be actually conducted by such and such persons, but it cannot very well have anything to say about the question of ownership. This is

sometimes unfortunate, and it may be regretful under the present conditions in New York State, but we do not see how it can be avoided.

* * *

**PATENT
MEDICINES IN
ENGLAND.**

A select committee of the House of Commons on patent medicines has been holding sessions for some time past in London. The purpose of the committee is to make a thorough investigation in reference to the law with regard to the sale and advertisement of patent medicines in the United Kingdom, and to make suggestions and recommendations—if deemed advisable to do so—with regard to changes that should be made.

In the course of the inquiry it was shown that even three years ago no fewer than 41,757,535 patent-medicine stamps were sold in the United Kingdom. This was practically equivalent to one package of patent medicine for every man, woman, and child in the country. The gross receipts from the sale of the stamps was £355,000 (\$1,727,608). The receipts for the year ending March 25, 1912, was £327,856 (\$1,595,510). It was estimated by one of the witnesses before the committee that the amount of money spent on proprietary medicines in Great Britain in the year 1908 was £2,500,000 (\$12,166,250), which represented a sum sufficient to maintain 40,000 hospital or sanatorium beds.

Some time ago the British Medical Association suggested that when medicines are supplied otherwise than upon a medical, dental, or veterinary prescription the name and quantities of each of the constituents of such medicine should be plainly printed on the package, so that the label should constitute a guaranty of the contents of the package, and any false description, whether on the label or in any advertisement, should constitute an offense, and that the food and drugs act should be made to apply to proprietary medicines.

The committee is still hearing evidence, and its report will not be made public for some little time. Its recommendations are awaited with great interest, because of the very large use in the United Kingdom of patent medicines. In answer to a question put by the chairman of the committee, the solicitor to the customs and excise department stated that there was nothing, in his opinion, in the law as it now stands to prevent any person making up any sort of mixture containing anything

except obvious poison, from advertising it as a cure for any disease, and selling it to the public on payment of the stamp duty. He added that probably the authorities could prosecute if absolute fraud were established, but that it would be exceedingly difficult, in his judgment, to obtain evidence that would insure a successful prosecution.

* * *

**THE CANADIAN
ASSOCIATION.**

The Canadian Pharmaceutical Association held its fifth annual meeting not long ago in Vancouver. Inasmuch as this is a purely delegate body, it would seem that the attendance of 160, including the ladies, was quite gratifying. J. H. H. Jury of Bowmanville, Ontario, was elected president, and G. E. Gibbard of Toronto was reelected secretary-treasurer. A number of important questions were discussed, and among other things it was recommended that an advertising campaign be conducted to promote the wider use of the Canadian Formulary, and that an appropriation be made for this purpose. The report of the special committee appointed to consider the advisability of undertaking the coöperative manufacture of a line of domestic remedies and toilet articles, finally recommended a scheme for adoption which carried no financial responsibility.

The latter step may possibly have been suggested as the result of the controversy between the Association and the National Drug and Chemical Company, Limited, manufacturers of the Na-Dru-Co line of products. It would appear that for a year or two the Association has been vigorously protesting against the action of the Na-Dru-Co people in furnishing supplies to general dealers as well as druggists. After the subject had been vigorously discussed at the Vancouver meeting, and after a defense had been read from the company, a resolution was finally passed "requesting the management of the company to refuse to sell Na-Dru-Co preparations to any dealer except a registered druggist in places where registered druggists are located." The resolution went on to declare that no line of goods not adopting this principle could be indorsed by the Association, and retail pharmacists throughout the Dominion were urged to support the Association in this attitude.

A paper on price regulation by Mr. Watters of Ottawa attracted a good deal of attention. Mr. Watters declared that the association stood

for jobbing prices on the \$2.00, \$4.00 and \$8.00 basis, and that products not marketed in accordance with these figures should be discountenanced by druggists generally. Another form of price regulation came up when it was urged that the schedule of prices for general articles adopted at the Halifax meeting should be kept in mind by druggists throughout the country and should be lived up to by everybody concerned. It was declared under this head that whereas jobbing prices had advanced on many things, retailers were still selling their supplies at the same old figures.

* * *

PARCELS POST AT LAST!

At last, after many years of agitation, and despite the opposition of the N. A. R. D.

and many other retail organizations, a parcels post law has been enacted by Congress. The measure, however, is not so objectionable to retailers as some of the earlier bills were, and the N. A. R. D., for instance, professes to be quite pleased with it. In any event parcels post legislation was bound to come, and it could not be prevented.

The new law, instead of providing for the flat postal rate to which we are accustomed with smaller packages, will provide for charges based on the length of haul. This is what is called the "zone" idea. Above four ounces rates will be paid by the pound or fraction, and they will vary with the distance as follows:

	First Pound.	Each Additional Pound.
Rural route and city delivery.....	.05	.01
50 mile zone.....	.05	.03
150 mile zone.....	.06	.04
300 mile zone.....	.07	.05
600 mile zone.....	.08	.06
1000 mile zone.....	.09	.07
1400 mile zone.....	.10	.09
1800 mile zone.....	.11	.10
Over 1800 miles.....	.12	.12

According to this system, mail-order houses located in a distant city will not be able to deliver goods by mail as cheaply as the druggist or other retailer who is located a few miles away from the customer. This gives merchants in the smaller towns throughout the country, who have always felt mail-order competition acutely, an opportunity to build up a mail-order trade themselves with the farmers and others on the rural routes in their vicinity. It is much to be feared that if dealers do not seize upon this opportunity during the early years of the operation of the law, they will

awake later on to find that others have taken the business away from them.

According to the law practically all kinds of merchandise can now be mailed, including even products of the farm and garden, and the outside limit of weight is seven pounds and the maximum combined length and girth is 72 inches. Postage on all such packages shall be prepaid in the customary manner by affixing stamps especially printed for parcels. The Post-office Department at Washington has a lot of work to do in order to get ready for the transportation of parcels, but it is announced that the law will be in full operation by the first of January.

* * *

THE INTERNATIONAL CHEMISTS.

The International Congress of Applied Chemistry is a remarkable organization. This year's meeting was held in the United States, and it was the first time that the Congress had visited our shores. The sessions began in the city of Washington and ended in the city of New York. The work of the Congress is divided up into a bewildering number of sections, and the scope and variety of its activities are indicated when the statement is made that this year no fewer than 735 papers were read among twenty-four different sections. Another surprising fact is that while the total membership of the organization comprises about 4500 people, as many as 2173 were present at the meeting. Among the visitors were men of international prominence from countries all over the globe.

One of the sections of the Congress is devoted to pharmaceutical chemistry, and before this were read a number of papers on assay methods, plant chemistry, coloring substances, and the like. Among those from abroad who were interested in this section was John C. Umney, the president-elect of the British Pharmaceutical Conference.

Following the final adjournment in New York City, many of the members went on a tour of inspection throughout the country, visiting the leading industries in most of the prominent cities. A large party arrived in Detroit the 20th of last month, and a busy day was spent here. Automobiles were furnished by individual members in the drug and chemical trade, and the visitors were driven rapidly from one plant to another throughout the day. Along in the middle of the afternoon the

establishment of Parke, Davis & Company was reached, and here, after a trip of inspection had been made, a dinner was tendered by the house to its guests. Subsequently a chartered boat took the party up around Belle Isle, into Lake St. Clair, and finally landed the chemists at the railroad depot, whence they departed for the next city on their route.

* * *

A UNIQUE DINNER.

We have been at some unique dinners ourselves, but we have just been reading about one which certainly deserves the laurel wreath. It was tendered in San Francisco to President R. E. Miller, of the Owl Drug Co., upon his return from a tour of Europe and Egypt. Here is a description borrowed from the *Pacific Drug Review*:

The fun began the moment the guests took their seats at the table and suddenly discovered that the chairs were all of the collapsible variety. Then, when all were seated again, this time more firmly, the center of the table opened mysteriously and a dainty miss appeared from the depths of Nowhere and welcomed Mr. Miller in behalf of his hosts. The table had been electrified so that it was impossible for one of the diners to pick up a knife or fork without receiving a mild shock. And suddenly darkness descended over all, thunders crashed, the lightning flashed, and in the midst of a driving snowstorm of confetti fantastic goblins played pranks through the banquet hall. The wines were served in medicine bottles, and the cigars and matches were loaded with surprises, while even the loaves of bread when cut were found to be filled with wierd animals made from rubber.

This certainly was some dinner! We do not see, however, why the diners waited to get shocked until they picked up their knives and forks. The time to do that was when the "dainty miss" appeared.

* * *

A DRUG-CLERK INVASION?

The drug clerks in New York City seem to be worried. They have an organization there known as the National Pharmaceutical Society, and a meeting was called recently "to formulate a plan to fight the threatened invasion of clerks from Massachusetts and other States in New England." It would appear that "a certain lobbyist," whoever he is, has become active in the interests of a bill to establish interstate reciprocity of licenses between New York State and Massachusetts. Inasmuch as Massachusetts reciprocates with all of the other New England States, the N. P. S. feared that this would open up the fences all

along the line. New York, you know, is one of the States which has the graduation prerequisite. A man may not become a registered pharmacist, and entitled to be the proprietor of a store, until he has been graduated from a reputable and recognized school of pharmacy. None of the New England States except Rhode Island has a similar law, and the clerks therefore feel that if reciprocity were established between New York and Massachusetts, the New York clerks would be subjected to unfair competition. We read that "the meeting concluded after five hours of speech-making and debate," but we do not know just what was done to avert the threatened inundation.

* * *

A POLITICAL SUGGESTION.

Henry Riechel, president of the newly consolidated Michigan State Pharmaceutical Association, has sent out an urgent appeal to members to see to it that proper candidates for the State legislature are first nominated at the primaries and subsequently elected. Mr. Riechel declares that at least two bills are scheduled to come up this winter in Lansing which will prove very embarrassing to retail druggists. One is a measure which would compel druggists in "wet" counties to restrict their sales of liquor to physicians' prescriptions, as has been the case for some years in "dry" counties. The other is a measure, said to be backed up by the saloon interests, which would impose a liquor tax upon druggists of \$500. Mr. Riechel wants to see to it that a legislature is elected which will be hostile to both propositions, and he urges druggists throughout the State to interview candidates, find out where they stand, and vote for the right men. It is quite evident that the new organization in this State, resulting from the two preëxisting bodies, is going to interest itself very actively in legislative matters.

* * *

AGAIN!

Somebody introduced a resolution at the Denver meeting of the A. Ph. A. suggesting legislation to insure legible hand-writing in prescriptions. This "reform" bobs up every little while, and probably always will. We sympathize with druggists. We have been there ourselves—and we know what the conditions are. But all the same the idea of enacting any definite legislation is mere bosh. One

of our contemporaries, in discussing the Denver resolution, argues that inasmuch as this is the day of the typewriter and the adding machine, and since all correspondence and even much of the bookkeeping are done with these aids, there is no longer any excuse for the physician using the pen to write his prescriptions. But what about the doctor who, at the bedside of a patient at two o'clock in the morning, wants to write a prescription? Is he going to do it in the good old way, by holding a prescription pad on his knee, and using a pencil or fountain pen, or is he going to take a portable typewriter along with him in his left hand wherever he goes?

* * *

THE 50TH LIGGETT STORE.

The fiftieth drug store in the Liggett group has recently been established in New

York City at the corner of Broadway and Thirty-fourth Street. It is said to be one of the finest establishments in the country. At any rate, the rental amounts to \$110,000 for the first year, which means \$20 a square foot. The corner, however, is the busiest in the city, and apparently justifies this enormous figure. The lease will run for twenty-one years. The store has thirteen departments, including the soda fountain, and there are nearly three score employees. There are ten dispensers at the soda fountain alone. The manager is H. H. McKenzie, who has had a good deal of experience as manager of various Liggett and Hall & Lyon stores in New England. The Liggett stores now cover such leading cities as Boston, Providence, Worcester, Cincinnati, Detroit, New York, and possibly other places.

* * *

THE NEW WOMAN'S PRESIDENT.

The new president of the Woman's Organization of the N. A. R. D., as we reported last month, is Mrs. Jessie F. Water-

house, of Newton Highlands, Mass. Mrs. Waterhouse, we believe, is president of the Boston Chapter of the W. O. N. A. R. D. In club work and in speaking she has evidently had a good deal of experience. She has been a member of a literary club for upwards of ten years, and is actively interested in the work of St. Paul's Episcopal Church in her home town. Prior to her marriage she was a successful elocutionist. Mr. and Mrs. Waterhouse live at 1083 Walnut Hills in Newton Highlands.

ANOTHER RUMOR.

We gather from the September issue of the *Pharmaceutical Era* that denial has been made of the rumored consolidation of a considerable number of leading wholesale drug houses in the Central States. The original report apparently was, according to the *Era*, that these houses were to continue to act somewhat independently in the conduct of their jobbing transactions, but were to unite in the establishment of a laboratory chiefly for the manufacture of a line of non-secrets like those bearing the A. D. S. and the Rexall labels. If there is anything to these reports, it will come out in time, and meanwhile we shall try to wait patiently in order to learn what is what.

* * *

COCA-COLA VERSUS THE A. D. S.

The Coca-Cola Company has brought suit against the American Druggists' Syndicate in an endeavor to restrain the latter from continuing its practice of making and selling a specialty known as "Extract of Coca and Kola." The Coca-Cola people declare that its trade-mark rights have been violated, and that unfair competition has resulted. They declare, further, that several members of the A. D. S. have substituted the A. D. S. product when Coca-Cola has been called for. Accordingly these druggists are made codefendants with the A. D. S. in the suit brought to secure an injunction. To these several allegations the A. D. S. enters a general denial, and a prolonged litigation is expected to follow.

* * *

COMMITTED SUICIDE.

We said something last month about the action of H. A. Metz & Co. and Victor Koechl & Co., both of New York City, in prosecuting druggists for the sale of aristol, salvarsan, pyramidon, and other products which were contraband in nature, and which had not been secured from the owners of the patents and trade-marks. Since then we have seen that David M. Schurr, of Brooklyn, who was supposed to be the source of supply for most of the peddlers of these goods in the East, committed suicide on the evening of his arrest. Other dealers preferred to stay on earth and defend themselves. The cases are still pending in the courts.

EDITORIAL

"LET GEORGE DO IT!"

The editor of the *Midland Druggist* has recently gotten rather tired of well doing—we all weary at times. He and his journal for years have stood for the best things in pharmacy in Ohio and some of the adjoining States, and much excellent work has been done in legislative and other directions. The efforts of the journal itself, too, have been supplemented by personal work of a vigorous sort.

But now, after years of unselfish and aggressive leadership, and after an equal number of years of scant and even critical support from the rank and file, the editor is indulging himself in a few minutes of pessimism. He is indignant over the apathy, the indifference, and even the carping opposition of those whose assistance he has had every right to expect. He gives a few instances to prove his point. Here is one:

Some years ago, to help out a few reformers in a neighboring State where taxes and the oppression of unjust laws were gradually crushing the life out of the drug business, this office on its own account and at considerable expense, sent a letter to each and every druggist in that State, telling them of the movements on foot in their behalf and asking for their help in organizing the State. They were then paying State and local taxes for the privilege of doing business. By organized work they could repeal the law and save each one at least \$50 a year. We did not ask them for any money, but *we got two replies from the entire State.*

Here is another specimen experience:

An officer of the State Auxiliary who was laboring at the Capitol building like a slave to prevent the enactment of some freak legislation, sent a letter to the trade explaining the difficulties he, as chairman of the legislative committee, was having, and advised that if this bill was defeated, they would have to come across with the necessary money. An assessment of \$2 was asked from each member. He got \$2 from the whole State, and was afterwards asked what he did with the money contributed for legislative purposes! *If that bill had passed it would have cost every druggist in the State about \$200 a year in additional store expenses.* Was that apathy or plain stupidity? Although the bill was defeated it was not due to any assistance the committee received from the trade.

Pity 'tis, 'tis true. It is the unfortunate experience of all those who strive to work for their fellows that they must largely work alone. If they count on coöperation they are

likely to be cruelly disappointed. The very men who are chiefly to be benefited, and who theoretically should work the hardest to defend themselves and their fellows, are at the same time the very men who do nothing at all but kick. Afterwards, if their defense has been successfully accomplished, they are entirely willing to reap all the advantages without expressing even a thank you. If, on the other hand, failure has resulted, they are quick to come forth with their protests, complain bitterly of the incompetency of their leaders, and indulge in more or less open accusations of indifference, incompetence, or even graft.

This seems to be human nature—and human nature is often weak and erring. No disposition is more universal than the one expressed in the popular phrase of the day, "Let George do it!" How often have we seen the work of an association or a club absolutely neglected by the great majority of its members, and then, when a few willing men rushed in to do what had to be done, they received nothing but intimations that "this organization is run by a clique and there is no use of our trying to do or say anything!" This practically is an epitome of the facts in every last organization in the United States. It is true of political organizations, and it furnishes the reason for the political boss. Others simply won't do the work; somebody has to do it, and that somebody becomes a "boss" which it is now the fashion to deride. But there wouldn't be any bosses if people themselves would do their duty—there wouldn't be any room or necessity for bosses. The people themselves would be the bosses. "Shall the people rule" is a question which will be answered the very minute the people want to rule—and not before.

Oh, well, this is a pretty big question and we are wading out in the open sea. Anyway we sympathize with our friend the *Midland Druggist*. He certainly has had his troubles—but then we all have them. Cheer up! Things will be better in the by and by.

REFERENDUM VOTES ON THE GRADUATION PREREQUISITE.

Again and again we have declared our conviction that the graduation prerequisite in pharmacy can only be realized in the different States as fast as general pharmaceutical senti-

ment in favor of it is developed—and no faster. Soon after New York and Pennsylvania led the way by establishing the graduation requirement, the movement was taken up in eight or ten other States. So far, however, only in Rhode Island has a law actually been enacted, although in the State of Washington the Board of Pharmacy has established the graduation prerequisite on its own initiative. Why have the bills in the other States failed of passage in the legislatures? Simply because pharmacists were divided among themselves—because the sentiment in favor of such legislation was not sufficiently strong and unanimous.

For this reason it is exceedingly interesting and important to note that popular votes have recently been taken in at least three States—Michigan, Illinois, Minnesota. The purpose was of course to discover what the general opinion was on such legislation. The Michigan vote was taken last year and was recorded in the *BULLETIN* at the time. Unfortunately the voting papers were sent out in the annual reports of the State Board of Pharmacy, and apparently many druggists failed to find or see them. As a consequence only 261 druggists voted, but it is a fact of possibly considerable significance that 200 expressed themselves in favor of prerequisite legislation, whereas only 61 voted against it.

This year similar votes have been taken in Illinois and Minnesota. In Illinois, as we reported some time ago, the results were 965 in the affirmative and 247 in the negative. This represented so large a majority sentiment that at the annual meeting of the State association later on it was unanimously decided to give formal approval to the prerequisite idea, and to seek an amendment to the pharmacy act at the next session of the legislature. In Minnesota a post-card vote showed 80 per cent of the voters in favor of the graduation prerequisite, and subsequently at the State meeting another vote was taken. This resulted similarly in a majority in favor of progress, although the majority was not so pronounced.

Thus in these three States the prerequisite idea, in accordance with modern political methods, has been subjected to a popular vote. Druggists have had a chance to say themselves whether they wanted such legislation or not, and apparently in all three commonwealths a considerable majority have ex-

pressed themselves in favor of advancement. So far so good. For unless pharmaceutical sentiment is really in favor of prerequisite legislation, and will stand behind its enactment first and its enforcement afterwards, it is worse than folly to attempt it. As with all other evolutionary movements, a sufficient period of agitation and education must precede actual achievement.

BEGGING THE QUESTION.

Now, however, an interesting situation arises. In Illinois, at least, it is apparent that those who are against the prerequisite mean to keep up their opposition. Some time ago, shortly after we had chronicled the result of the Illinois vote in the *BULLETIN*, and had declared that a large majority were in favor of the graduation requirement, Wilhelm Bodemann wrote us a strong letter of protest. Mr. Bodemann, as everybody knows, is an open, direct, and avowed enemy of the prerequisite. He will have none of it! The very mention of it is anathema to him! What was Mr. Bodemann's complaint to us? Simply this, that the referendum vote in Illinois was not representative. Out of 5618 registered pharmacists on the rolls of the Board of Pharmacy, only something like 1200 expressed themselves. "How," he asked, "do you figure out that 965 is a majority under these circumstances?"

Well, this opens up a pretty big question. Much could be said on both sides of it. In Illinois, if there really are 5618 proprietors of retail stores, only a little over 20 per cent of them registered their opinion on the prerequisite vote. Where, then, do the other 80 per cent stand? One might argue that they want the prerequisite; another might hold that they do not want it; but who can read their minds with any accuracy? The fairest assumption is that the 1200 who voted closely represent the 4000 or more who did not vote, and that the results were therefore approximately determinative and accurate.

This, indeed, is the assumption made in all political voting. A mayor, a governor or a president is always elected by just this method. The majority of those who actually vote do the electing. Those who do not vote must be ignored, and in practice they are ignored. Take the primaries early this summer, for in-

stance, in the bitter Taft-Roosevelt feud. Mr. Roosevelt nominally carried a number of pivotal States like Ohio, Illinois and Pennsylvania. And yet the actual vote in these States represented only from 15 to 30 per cent of the total number of registered voters. Some people have since claimed that the remaining 70 or 80 per cent of the voters, if they had expressed their preferences, might have told an entirely different story, but nevertheless Roosevelt delegates were sent to Chicago.

Now we have no purpose of expressing any opinion about the Taft-Roosevelt situation, or about the Chicago convention. That is entirely beside the question. We simply want to show that in the Taft-Roosevelt primaries, as in all other primaries and elections, the day was carried by the majority of those who actually registered their opinion. The "silent vote" doesn't count and can't count. On this assumption we believe that the graduation prerequisite has fairly carried in the States of Michigan, Illinois and Minnesota, and that any attempt to show that it hasn't is simply to indulge in specious reasoning. We observe that the *Western Druggist*, in its systematic campaign against the graduation prerequisite, has argued likewise that the vote in Illinois indicated nothing, because, forsooth, it only represented 20 or 30 per cent of the possible number of voters. To us this seems like merely begging the question.

THE HALL OF FAME

THE SUDDEN DEATH OF JOHN W. DAUGHERTY.

John W. Daugherty, attorney and manager of the Druggists' Indemnity Exchange of St. Louis, died very suddenly of apoplexy several weeks ago on a train pulling out of Indianapolis. Just before that he had attended the Milwaukee meeting of the N. A. R. D., and was then in such manifest good health that his subsequent death provoked great astonishment. It appears that Mr. Daugherty had only recently been married to the Countess DeBrie of France, and, although few knew it at the time, was really on his honeymoon in Milwaukee. Mr. Daugherty was a man of ability, and he had built up the Druggists' Indemnity Ex-

change to a point where it enjoyed a large volume of business and the confidence of the retail drug trade of the country. Fortunately he is succeeded in the position of attorney and manager by an understudy who is thoroughly familiar with the Exchange—Mr. H. W. Eddy. For five years Mr. Eddy acted in the capacity of general representative, and is well known to



JOHN W. DAUGHERTY.

the members of the N. A. R. D. and the numerous State pharmaceutical associations. The business will therefore go on as before, and will undoubtedly continue to show the same growth and development which have been manifested from the first in the history of the organization.

RETURNING FROM DENVER.

Following the Denver meeting of the American Pharmaceutical Association in August, quite a number of the members came back east through Detroit, lured by the drug manufacturing interests of this city. Some of them paid appreciated calls at the BULLETIN office. Among them was Irving P. Gammon, of Boston, Mass., who went out to Denver primarily to attend the meeting of the National Association of Boards of Pharmacy as the accredited delegate from the Massachusetts board. Mr. Gammon, if we mistake not, is also one of the Board of Trustees of the Massachusetts College of Pharmacy, and he is a man of influence in pharmaceutical circles in

Boston and throughout the State of Massachusetts generally.

Another caller was Caswell A. Mayo, the well-known editor of the *American Druggist*. Mr. Mayo sat down in the BULLETIN sanctum and entertained us for two hours as only an accomplished raconteur could possibly do. If there is any man in American pharmacy who has a greater fund of anecdotes, and who can relate them with more grace and humor than Mr. Mayo, we have not yet made his acquaintance.

NOMINEES FOR THE A. PH. A. PRESIDENCY.

Following its usual custom, the American Pharmaceutical Association, at the Denver meeting in August, nominated three candidates for the presidency of the organization. These



CHAS. M. FORD.

names will shortly be voted upon by the entire membership through the medium of the mails. The candidates are Charles M. Ford of Denver, George M. Beringer of Camden, N. J., and F. W. Meissner of La Porte, Indiana. All three are men well known to the pharmacists of the country, and particularly to those who attend the annual conventions of the A. Ph. A. Mr. Ford has been a retail druggist all his life up to a year or two ago, when he sold out his store and became drug inspector for the State of Colorado. Mr. Beringer is a retail pharmacist in Camden, where he conducts a store

of the professional type, and where he does much analytical and chemical work for the pub-



GEO. M. BERINGER.

lic and also, we believe, for the city authorities. Mr. Meissner has a store in La Porte, so that



F. W. MEISSNER.

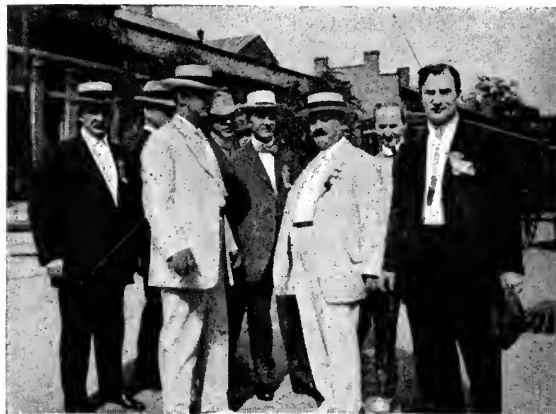
all three candidates this year may practically be considered retailers.

PRESIDENT OF THE TRAVELERS' AUXILIARY.

George C. Frolich, one of the traveling representatives of Parke, Davis & Co., was elected president of the Traveling Men's Auxiliary of the Massachusetts State Pharmaceutical Association at the meeting in Swampscott a month or two ago. Mr. Frolich is a man of versatility. At this same meeting, for instance, he won the first prize in a contest over the identity of crude drugs and chemicals.



A crowd of delegates on the Auditorium steps, most of them from Pennsylvania, with William E. Lee in the foreground at the left of the picture.



Some of the local Milwaukee hustlers, including Messrs. Greenwood, Schmidt, Jones, Eckstein, Wilson, and Thompson. Mr. Eckstein is the third gentleman from the right.



A group of Detroiters—Charles F. Mann, Grant W. Stevens, and James W. Seeley. This was taken on the steamer trip Friday afternoon.



Among these men are Charles H. Huhn, chairman of the Executive Committee, H. B. Guilford, ex-president, and J. Arthur Bean, a member of the Executive Committee.



Miss Gertrude Mann, daughter of Charles F. Mann, of Detroit.



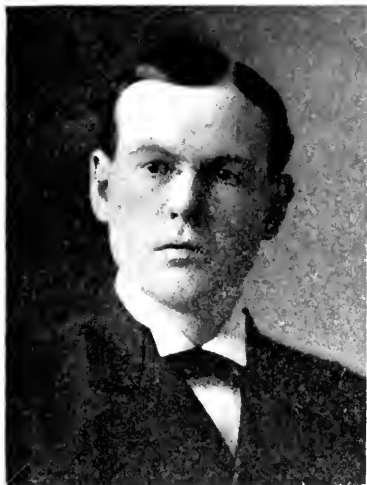
The one and only Wilhelm Bodemann is in the center of this jolly group.



M. B. Craig of Jacksonville, Florida, and Hugh Craig of N. Y. City.

Some N. A. R. D. Snapshots Taken at the Milwaukee Convention in August.

(We are indebted for these pictures to the courtesy of A. R. Eberle, manager of Eberle's drug store, Watertown, Wisconsin.)



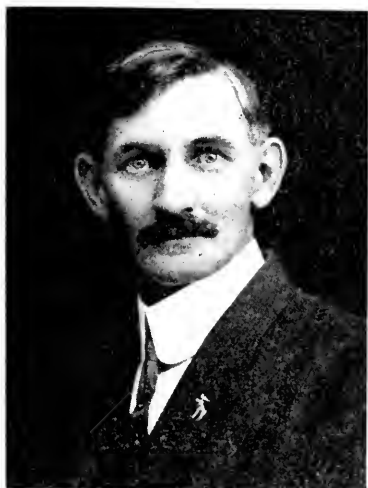
A. B. Robertson, Lansing, Mich., Republican nominee for representative in the State legislature.



Harry E. Fox, Gaylord, Mich., nominee on the Republican ticket for county treasurer.



Archie M. Reid, Detroit, Mich., nominee for city alderman in the Fifteenth Ward.



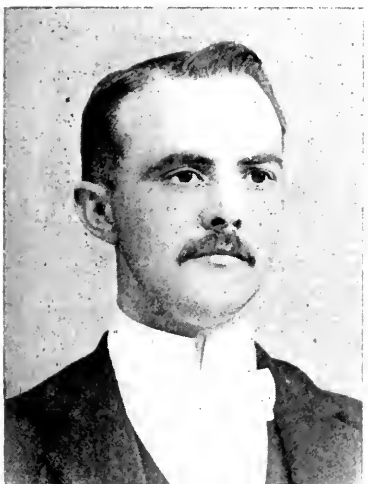
Robert Homan, Unadilla, N. Y., Progressive nominee for member of assembly in the State legislature.



R. M. Gray, Statesville, N. C., nominated for county superintendent of Public Instruction.



Dr. R. C. Droege, Cleveland, Ohio, who has received the nomination for coroner of the county.



T. N. Hall, Mooresville, N. C., Democratic nominee for the State legislature.

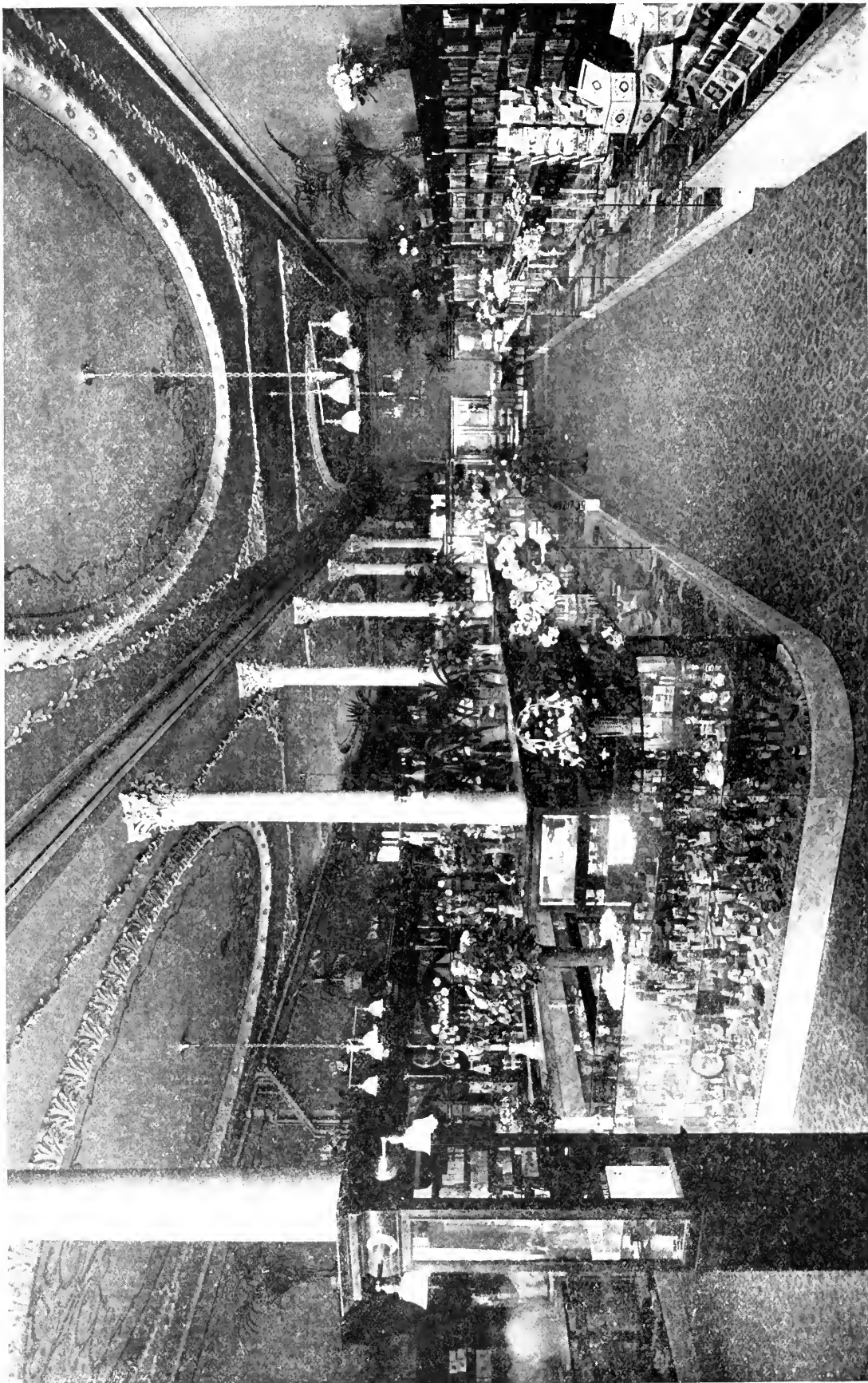


Frank Shane, Eldon, Iowa, nominee for reelection to the State House of Representatives.



Jos. C. Wirthman, Kansas City, Mo., a member of the upper house of the city council.

Druggists Up for Election to Public Office in November.



The New Store of George M. Weber in the Denison Hotel Block in Indianapolis.

The Walrus Manufacturing Co., who furnished the fountain, the Wilmarth Show Case Co., who supplied the show-cases, and other experts and specialists helped Mr. Weber realize his ambition to make this one of the most beautiful stores in the country. He still retains his prosperous pharmacy in the Claypool Hotel.

How the Druggist's Sundries Are Made.

SIXTH PAPER: GATHERING CRUDE RUBBER.

The Interesting Story of How it is Collected and Shipped on the Tributaries of the Amazon in the Jungles of South America—The Natives Call it "Black Gold," so Valuable is It.

By ALEXANDER P. ROGERS.*

Upon a trip last summer up the Amazon River to the source of one of its great tributaries, I had an opportunity to witness the various processes by which the enormous rubber crop is gathered in the jungles of tropical South America, and shipped to the markets of the world. From the first step to the last the

little known quarter of the globe, but wherever the trees existed along the upper river banks, we found these industrious rubber gatherers hard at work.

WHERE THE SUPPLY COMES FROM.

Look at any good map of South America and you will see a great network of rivers flowing from the Andes through the center of the continent, most of which finally empty into the Amazon. They spread out in every direction from the main artery of the Amazon, like the fingers of one's hand, covering the whole interior region of equatorial South America. The particular tributary I traveled on, however, had its source far to the south away from the Andes, so that we did not obtain a view of these high mountains on any part of the trip. Our course lay up the Madeira River, which is over 900 miles in length and empties into the Amazon nearly 900 miles above its mouth. From the Madeira, we passed to the Mamore for 150 miles, and then went up a tributary of that river, called the Guapore, for another 900



A pile of balls of crude rubber on the banks of the Madeira River in the heart of South America. The natives call this "black gold," and no wonder—for a single ball weighing 75 pounds is worth nearly a hundred dollars!

industry of producing and handling the crude rubber, or "black gold," as the natives call it, is an intensely interesting occupation. We who ride in comfortable automobiles over beautiful roads can hardly realize the amount of labor and suffering endured by a semi-civilized race of people for our pleasure; nor do the poor peons, who perform most of the actual labor, realize the boon to civilization their efforts produce. It is only after a trip such as I took through the heart of the finest rubber country in the world that a fair conception of the industry can be grasped, and an idea of the value of this wonderful substance obtained.

My party was composed of several trained observers, as all mining engineers must be, bound for the head waters of the Rio Guapore, 3000 miles above the mouth of the mighty Amazon. We thought we were going to a



Poling a boatload of crude rubber in quiet waters.

miles, until the water became too shallow to proceed. In this direction, the principal rubber-growing section exists along the Mamore and Guapore Rivers, the product being taken down stream in huge rowboats to a place called San Antonio on the Madeira River, 800 miles above its mouth and at the head of navigation for ocean steamers. Above this point,

*A paper written by Mr. Rogers for "The Goodrich," published by the B. F. Goodrich Company, Akron, Ohio.

for a distance of some 220 miles, a series of ugly rapids exists. Once you have passed them, however, the river is again navigable by light draft steamers for another 1000 miles.

THE CRUDE-RUBBER BALLS OR "BLACK GOLD."

At San Antonio we obtained our first sight of the crude rubber being loaded for shipment to the markets of New York and London.



Hauling a boat of rubber around one of the rapids in the river to avoid the dangerous sport of "riding the rapids."

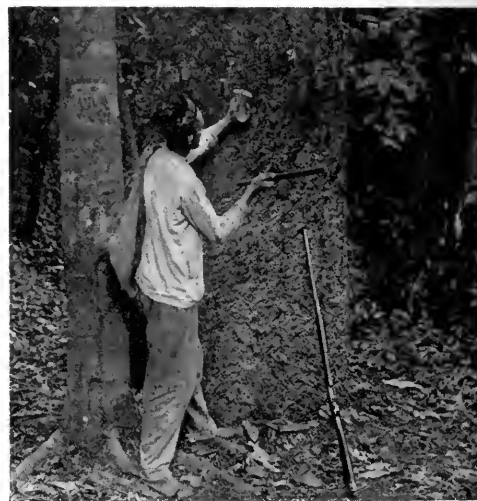
Here there were great piles of rubber balls, each one some 18 inches in diameter, and weighing from 50 to 75 pounds, bearing the owner's private mark burned into it for identification. They were of a dead-black color, and looked as if they had undergone rough usage on their long trip down the upper rivers. In this, however, I was somewhat mistaken, as I was later witness to the extraordinary care with which the balls are handled in descending the dangerous rapids. Crude rubber is worth \$1.25 a pound, so that a ball weighing 75 pounds is quite a valuable article, and you begin to see why the natives refer to it as "black gold." My first impression, however, was one of curiosity, as I looked at these peculiar objects having the appearance of huge misshapen cannon balls with a two-inch hole through the center of each one. There was an irresistible desire to kick them and see your foot jump away again from the recoil of the rubber. You were careful not to do it many times, however, as it is very solid stuff and the operation hurts you more than it does the rubber.

TRANSPORTING THE RUBBER.

In order to pass the rapids above San Antonio, the only method of transportation that has existed up to date, for passengers and freight alike, has been to work your way in huge rowboats, shaped much like our racing

yachts without any fin-keel. These boats are manned by 18 or 20 natives, and a pilot, who handles the rubber and commands the crew, for it is dangerous work and a man with thorough experience of the currents must be in charge. In going up stream, the crew sits on the gunwales of the boat and all paddle in unison over the quiet waters close to the shore where the current is less strong. Whenever a rough stretch is reached and no headway can be made by paddling, long poles are brought out and the crew resorts to poling. If the current proves too swift for this method, most of the men are sent ashore with a heavy two-inch tow-rope to pull the boat ahead by main strength.

When a bad rapid is reached, however, it becomes necessary to unload the whole cargo and transport it around to the head of the falls—a task which may take a day or so to complete. Then, the empty boat must be either worked up over the rapid, or else pulled bodily overland to the quiet waters above. It is very slow traveling, especially when the crew feels "tired," as it often does, and decides to take a rest while one of its number goes off hunting



A native gathering the rubber sap or "milk" in little cups as it drips from the tree. The process is not unlike the gathering of maple sap in the United States.

in the jungle for a fat pig or turkey, or even a monkey, to feast upon. It took us over a month to ascend these rapids, camping each night on shore in the jungle, where you must be very careful not to get bitten or stung by the snakes and insects that abound everywhere.

As all the rubber, however, is brought down stream, its rate of progress is much faster than ours was. One of these boats will hold ten

tons of freight, and the crews become so skilful that they take chances on riding over most of the smaller rapids. We would watch them coming down the center of the river at racing speed, the paddlers all in their positions on the gunwales, and when they approached a rapid the men would work like mad to force their boat into the smoothest part of the current. Then the excitement was intense, as they shot



A rubber collector's hut on the Rio Madeira, in the midst of the South American jungle.

down the steep incline like a millrace, and went bounding over the great billows below, and finally entered quieter waters again.

DANGEROUS WORK.

They are not always lucky enough to come through so easily, however, as a wave may wash over the sides of the boat, or they may not be able to avoid some of the rocks and sunken timbers which abound in the dry season. Then a tragedy usually follows; the whole crew may lose their lives, and the cargo may be lost. The rubber balls will float in water, but in this wild region they become scattered easily, and a large percentage are never recovered by the rightful owner, once they get adrift in this wide river. I saw one such crew clinging to their swamped boat. They were rescued just in time before another rapid was reached, which would have hurled them to destruction.

The more conservative shippers generally insist that great care must be taken, and require their men to land above the rapids and either transport the rubber around on land, or else float the balls in bunches through the quietest part of the rapids. This is quite an interesting proceeding. Perhaps 20 or 30 balls are strung on a large rope, which passes through the hole in the center of each one. With a man in front and another behind this string

of balls, and perhaps one or two other men carefully guiding the center, they swim from point to point until the foot of the rapid is reached. There the balls of rubber are unstrung and piled on the shore, while the men return for another load. Finally, the boat itself is let down and reloaded as before.

When you consider there are over twenty bad falls in these rapids, and innumerable minor swift places, you can realize the expense and risk involved in sending a cargo of \$10,000 or \$15,000 worth of rubber through this section of the river.

A RUBBER RAILROAD.

The losses in the transshipment of rubber by water, indeed, have been so great that the Brazilian government has finally come to the rescue and is now building a railroad, 220 miles long, around the rapids. The history of this road would make an interesting story in itself, but I have only space here to mention it in a cursory manner.

Bordering the Madeira River, the jungle is one of the worst and deadliest in all the world. All the natives are infected with malarial fever,



An Indian hunting with a blow-gun in the Amazon forest.

and it has been a hot-bed for yellow fever and the terrible beriberi. Out of the first 52 men sent to survey the road, 49 died in a short time, and the remaining three fled in terror. Finally, Americans, with great experience and indomitable courage, backed by strong financial interests, took charge of the work and have just completed it. If it had not been for our experience in Panama, I even doubt if they could have been successful. To one who rides

over the line to-day in a comfortable coach, these statements may appear like exaggerations, as he does not realize what deadly enemies, in the form of intangible microbes, lie hidden in those quiet jungles, which can be conquered only by costly preparation and a trained medical service.

The result of the railroad will inevitably be to displace the romantic and dangerous river travel over the rapids, but we are living in a material age where the loss of life and valuable property will not be tolerated, even at the expense of romance. To-day the trains make this distance in one day, which we took over a month to cover. The upper terminal is at a place called Guajura-Merim, where we embarked on a small river steamer for the trip up the Rio Guapore.

THE RUBBER TREES.

As this place is at a slightly higher altitude and 10 degrees south of the equator, the weather becomes much more agreeable. On both sides of the river thick jungles existed in which, every now and then, the pilot pointed out a rubber tree to me. Where so many similar trees grow, it was very difficult to pick out the real rubber trees, but after a time I became sufficiently expert to distinguish them by their small leaves. They grow wild to perfection all along the banks, and attain a height of 50 feet or more. Like many large tropical trees, however, the trunk shoots up straight and clean without any branches on it until the head is reached far above the ground. We have no trees in our northern climate which resemble them very closely. The tree here is not, however, a rubber tree.

On our trip up the river we were obliged to tie up to the bank very often to cut fire-wood, and then I amused myself in tapping the rubber trees in the neighborhood. They were all scarred in many places, from the ground up as high as I could reach, by former tappings, but yielded some milk every time I cut them.

The sap, or milk as it is called, looks exactly like tinned sterilized cream, and flows directly under the bark. Whenever you cut into a tree with an ax or a machete, it drips out very slowly, not unlike the sap from a maple sugar tree. Of course I did not have time to collect any quantity of the milk, but what little I did save gradually solidified into a yellowish-white substance that could be stretched and snap back, just as an ordinary

rubber band will do. It seemed very curious to see this white liquid assume such qualities, and it was a never-ending source of amusement to me.

WHOLE FAMILIES GO COLLECTING RUBBER.

The season for gathering the rubber crop in this latitude begins about the middle of the dry season, or during our summer months. We occasionally passed whole families drifting down the river from the small settlements above on their way to certain places where the trees were very numerous. These were happy-go-lucky companies who traveled



The rubber trees are to be found in these thick jungles all along the banks of the Amazon and its tributaries.

in a unique kind of craft. Two large row-boats were lashed together and covered with a set of long poles to make a flooring 10 or 12 feet wide by 15 or 18 feet in length—something like a huge "catamaran." Around the edges of the floor, walls were erected, and the whole thing was roofed in like a house. All that was visible of the boats were the prows sticking out at each end, and in them the men sat who directed the course of these strange craft.

Within the house, at each end, a great quantity of corn on the cob was stored for the use of the workers during the season, filling half the room from floor to roof. The remaining space was used by half a dozen women and children, as well as several pigs, dogs, chickens, parrots, and a monkey or two. There were at least 20 or 25 human beings, besides the various animals, in one of these craft that I saw, but they all seemed to be happy and enjoying life to the full. They would be engaged in their work of gathering the rubber for four or five months, after which they would return to the settlements for the winter. The length of time depends upon their inclina-

tions, as they operate upon their own initiative and for their own profit.

IMPROVING THE YIELD.

Most of the large areas along the Rio Guapore, however, are owned by progressive European companies which carry on their business upon strictly up-to-date methods. They own tremendous areas, where the soil is adapted to the rubber tree, and maintain nurseries and experimental stations to increase and improve the trees. They also own and operate several river steamers, which ply between the stations for the purpose of collecting the rubber from the various sections and transporting it to the shipping points. To gather the rubber from places inland, away from the river bank, they have built long roads through the jungle over which huge wooden ox-carts can travel. Then a system of stores is generally established in various parts of the property, where the peons and others can buy the necessities of life. The rubber crop is usually gathered on a contract basis, the peons being sent out for the season, and paid for the rubber they bring back.

The Brazilian government is alive to the value of its rubber crop and does everything it can to promote the industry. For example, it is against the law for any one to cut down or mutilate a rubber tree, and if you are seen to

do such a thing anywhere in the country, you will immediately get into trouble.

BUENOS AIRES THE SHIPPING POINT.

Toward the upper end of the Guapore River, the distance to the ocean down the Amazon is so great, and the rapids have proved so costly, that it has been found cheaper to take the crude rubber up stream and 200 miles overland across a low continental divide to the Paraguay River, down which it is transported 2500 miles in steamers to Buenos Aires for shipment to Europe. This will all be changed, however, as soon as the railroad is in operation around the Madeira rapids, and the product will then go down the Amazon.

After my return to civilization from that interior country, where only at long intervals any news of the outside world is ever heard, it seemed strange to me that any human being would pick out such a wilderness to dwell in, even for "black gold." If one were born and brought up in the region, and had never seen anything else, I can imagine he might be happy, but it is not an attractive place for an outsider to stay in under any condition.

[NOTE BY THE EDITOR.—The foregoing paper is confined to the collection and shipping of crude rubber. The story of how this crude rubber is manufactured subsequently into many articles handled in every drug store was told in the BULLETIN for June of this year.]

IMPROVEMENTS IN OFFICIAL FORMULAS.

Slight Changes which Lead to Perfection in the Manufacture of Several Galenticals—Paper Read at the Denver Meeting of the American Pharmaceutical Association.

By S. K. SASS.

Many pharmacists, if unsuccessful in their first attempt to make some preparation according to the formula in one of the official books, will freely and unfavorably criticize the book, the constructor of the formula, or the committee of revision.

A little thought about the perplexing formula, patience, and some experimental work, with the expenditure of a little money, are the only things necessary to find out that the formula in most cases is good or nearly so.

We must remember that we do not all work under the same conditions, that atmospheric and climatic changes play an important rôle in

some cases, and that the change of seasons acts as another joker.

AROMATIC ELIXIR.

Using magnesium carbonate, in place of purified talc, gives better results. Five grammes is sufficient to prepare 1000 Cc. of perfectly clear elixir.

ELIXIR OF THE PHOSPHATES OF IRON, QUININE AND STRYCHNINE.

This important elixir is not as difficult to prepare as it at first appears. If prepared, as suggested by Mr. Dunn, with a slight change in the directions, a most satisfactory prepara-

tion, which will keep for a long time, is obtained. The formula and directions in the Pharmacopœia should be changed to read as follows:

Soluble ferric phosphate.....	17.500 Gm.
Quinine	8.750 Gm.
Strychnine	0.275 Gm.
Phosphoric acid.....	2.000 Cc.
Ammonium carbonate.....	5.000 Gm.
Alcohol	60.000 Cc.
Acetic acid.....	16.000 Cc.
Distilled water,	
Aromatic elixir, each a sufficient	
quantity to make.....	1000 Cc.

Dissolve the quinine and strychnine in the alcohol, then add the phosphoric acid and *three hundred and fifty cubic centimeters* of aromatic elixir. Add the acetic acid to the ammonium carbonate, contained in a suitable vessel, and when solution is complete add enough distilled water to make the product measure *fifty cubic centimeters*. Mix the solution of ammonium acetate with the solution of the alkaloids, and add enough aromatic elixir to make the liquid measure *eight hundred and eighty cubic centimeters*. Dissolve the ferric phosphate in *fifty cubic centimeters* of distilled water, and add enough aromatic elixir to make the product measure *one hundred and twenty cubic centimeters*. Finally, mix the two solutions and filter.

NOTE.—If precipitate appears, agitate until dissolved. Keep in a bottle covered with dark paper and well corked. This preparation will slightly darken with age, but its efficiency is not thereby affected.

SYRUP OF HYPOPHOSPHITES.

When made adhering strictly to the formula and directions of the U. S. P., this preparation is a failure. It will not keep for any length of time. When finished, it is not of the U. S. P. strength, as some of the hypophosphites are precipitated and left in the filter.

After some experimentation, I came to the conclusion that a little change in the formula, which does not affect the active principles, is necessary. Therefore I suggest the following as entirely satisfactory:

Calcium hypophosphite.....	45 Gm.
Potassium hypophosphite.....	15 Gm.
Sodium hypophosphite.....	15 Gm.
Diluted hypophosphorous acid..	2 Gm.
Lactic acid.....	1.25 Gm.
Sugar	640 Gm.
Water, a sufficient quantity to	
make	1000 Cc.

Dissolve the hypophosphites in *four hundred and fifty cubic centimeters* of water, and add the diluted hypophosphorous acid, lactic acid, and the sugar, which dissolve by agitation, and add enough water to make the product measure *one thousand cubic centi-*

meters. Filter, and keep in a glass container, well corked.

COMPOUND SYRUP OF HYPOPHOSPHITES.

The U. S. P. formula requires an increase in the amount of sugar called for, and a rearrangement of the directions. If these corrections are made, a most satisfactory preparation will result.

The formula and directions are as follows:

Calcium hypophosphite	35.000 Gm.
Potassium hypophosphite.....	17.500 Gm.
Sodium hypophosphite.....	17.500 Gm.
Ferric hypophosphite.....	2.250 Gm.
Manganese hypophosphite.....	2.250 Gm.
Quinine	1.100 Gm.
Strychnine	0.115 Gm.
Sodium citrate	3.750 Gm.
Diluted hypophosphorous acid.	15.000 Cc.
Sugar	815.000 Gm.
Water, a sufficient quantity to	
make	1000 Cc.

Dissolve the calcium, potassium, and sodium hypophosphites in *three hundred and seventy-five cubic centimeters* of water, to which *five cubic centimeters* of diluted hypophosphorous acid has been previously added. Dissolve the quinine and strychnine in *thirty cubic centimeters* of water, to which *ten cubic centimeters* of diluted hypophosphorous acid has been previously added. Rub the ferric and manganese hypophosphites with the sodium citrate, add *thirty cubic centimeters* of water, and warm the mixture on a water-bath, stirring continually until the salts are dissolved and a clear greenish solution is obtained. Mix the three solutions in the order named. Dissolve the sugar by the aid of a water-bath, and filter. Finally, add enough water, through the filter, to make the product measure *one thousand cubic centimeters*.

NOTE.—Keep in a bottle covered with dark colored paper, and well corked. In the northern latitude, and during the cold season in some sections, the sugar may be reduced to 805 or 810 grammes.

In conclusion, I may say that to be successful in making these and many other preparations only the best and purest material obtainable should be used. We cannot expect good results from cheap, inferior material. Consider as a guiding principle in your work the fact that there is nothing too good for the sick, that whatever is not good enough for your loving wife, your dearest child, and your father or mother is not good enough for any one else. We should be conscious of the duty we owe to humanity. We should keep in mind that we are only the servants of the suffering, and as such should serve them rightly, with a sincere and honest consideration for their welfare.

"MY BEST ADVERTISING SCHEME."

Three Successful Plans—An Inexpensive Way of Obtaining a Reliable Mailing List—How a Druggist Impressed His Townspeople with the Scope of His Prescription Business—Stimulating Sales by a Unique Premium Idea.

HOW I OBTAINED A MAILING LIST.

By H. E. READ, ALTAMONT, KANSAS.

I wish to describe the plan which we used to secure a mailing list. It certainly was a wonderful success. We obtained in all 1795 names, and when we cut out the duplicates we had a good, correct mailing list representing nearly every farmer in our community—over 400 correct names.

THE PLAN INEXPENSIVE.

The plan cost us about \$2.80 for the advertising and \$4.30 for the premiums. The books



H. E. Read.

cost us 9 cents each and the fountain pens 50 cents each. This may seem a little high for a mailing list, but previous to this we had to pay \$1.00 to \$2.00 for each of the route lists. The postmaster is not allowed or at least will not give them out except on special occasions, which made it necessary to get some one to run the lists for us. Then when we did get them, we had only about one-half the farmers. Furthermore, many of them who trade with you may get their mail off a route from another city. Consequently they never receive

any of your advertisements, if you have a list of just the rural routes going out of your town.

We sold our list to another merchant of the town for \$3.50, about half its original cost to us. This makes the plan less expensive. Of course, one would not desire to sell his list to his competitor, but you can find several mer-

Prizes Given Away to Boys and Girls

We want names and addresses of every one in your community and will pay you for them.

Read the Instructions Below.

To any boy or girl giving address of most farmers on all rural routes running out of Altamont, we will give a \$1.00 fountain pen.

To any boy or girl who gives the most addresses of farmers living within 8 miles of Altamont not on Altamont routes we will give a \$1.00 fountain pen.

Any boy or girl giving us address of more than 20 farmers (men over 21 years old) now living on routes 1, 2, or 3 out of Altamont we will give the choice of any Alger book in the 15-cent edition.

Any boy or girl giving us the address of more than 20 farmers living within 8 miles of Altamont that are not on the Altamont routes we will give any Alger book in the 15-cent edition.

Now boys and girls, if you know 20 farmers, you can get one of the books. And if you know more than any one else, you can have the fountain pen.

CONDITION.—The full initials and name must be spelled plainly, on any kind of tablet paper. Write on one side only. All named must be farmers over 21 years of age.

READ'S DRUG STORE,

Phones 21 and 68

Altamont, Kans.

This newspaper ad. shows how Mr. Read solicited names.

chants in most any town who are anxious to secure a complete and correct mailing list. If you can show them it is correct and complete, most of them will be willing to defray half the expense.

THE RESULTS.

The prize contest was a good advertisement, as it made friends and customers of those com-

peting. We secured several men customers just from the fact that their children were contestants. We gave every one who sent us 20 names a book. We were, of course, supposed to correct the lists. But we did not do that unless the contestants were close to the highest number of names. To have graded some of the contestants down might have disappointed them. They would not have received a book.

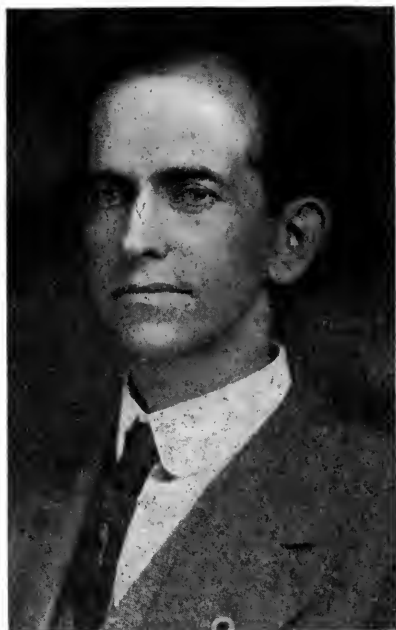
The editor of the paper ran the last advertisement—*i.e.*, the list of the winning contestants—as a news item free of charge, and seemed very glad to get the names.

The mailing list was the best, largest, and most easily secured of any that I ever obtained. Any merchant can follow the same plan.

BOOMING OUR PRESCRIPTION DEPARTMENT.

By W. B. CAMBURN, OWOSSO, MICH.

In the accompanying illustrations are shown two displays of a strictly pharmaceutical na-



Wade B. Camburn.

ture. One is made of prescriptions, the other of laboratory apparatus. The trims were arranged by R. E. Wood. We conceived the idea of making a special feature of our prescription department as the new prescriptions which we had filled were approaching 50,000 in number.

During our spare time we printed about 250 signs on cardboard that read "50,000," noth-

ing else. These signs were tacked about town where they could be easily read from the street or sidewalk, and were about one week in advance of our window displays and newspaper advertising. They attracted considerable attention and caused much speculation as to their meaning.

A few days after the signs were up, we had



Display of pharmaceutical apparatus in Mr. Camburn's window.

"50,000" in local columns of both daily papers. A little later this number appeared at the top of our advertisement in these papers with the



Fifty thousand prescriptions were exhibited in Mr. Camburn's window.

announcement that on a certain night the meaning of the 50,000 would be explained in this particular space. The people were asked to watch the place. Our window display appeared the same day as the explanation.

There had been so much interest taken in the mysterious 50,000 that our announcement and window trims attracted a great deal of attention. One newspaper reporter took up the matter and gave us quite a complimentary report of it in the local daily. During the time we were running these window displays, our space in the newspapers was used to boom our prescription department and to make known our facilities for filling prescriptions.

We also enclosed a folder calling attention to this department in every package that left our store. On Saturday these folders were placed in every farmer's wagon.

This particular advertising scheme attracted more attention to our store than any plan we ever used. It is needless to say we have enjoyed a decided increase in business along the line of pharmaceuticals.

EXPLOITING STORE SPECIALTIES BY THE PREMIUM PLAN.

By ROY S. WARNACK, NEW ORLEANS, LA.

Just before Christmas the thought to give or not to give occupies the mind of almost every druggist. It has been the policy of so many



Roy S. Warnack.

pharmacists in the past to give away calendars or souvenirs having a substantial value around the holidays, that in some localities it has become a fixed custom. People expect it and do not really appreciate the expense to the giver. They accept such gifts as a matter of course. They evidence no surprise on receiving them

and rarely say "thank you" even though the cost has been great. The advertising value is very small.

"LAGNIAPPE" IN NEW ORLEANS.

Especially is this condition true in New Orleans where the giving of "lagniappe" is the fashion. "Lagniappe" is ancient history in New Orleans, but for the benefit of my readers let me say it involves the giving of



Mr. Warnack's window display.

something for nothing. It means that on every five-cent sale one has to give about half a cent's worth of candy or gum. Purchasers of larger amounts expect a proportionate "lagniappe."

It has been our experience that charging a good price for our services as well as our merchandise gains us a large amount of respect as well as a larger bank balance. So we decided to apply this principle to our gifts during the past holidays. To-day as we look back upon the plan which we adopted, we are more than pleased. For the results were even better than we anticipated. We give the details of the scheme to BULLETIN readers, believing it will be profitable to any one using it at any season. Christmas or New Years is not a necessary pretext for launching such a plan.

CUP AND SAUCER PREMIUM.

The gift which we made was a cup and saucer and our purpose was: First, to gain new friends for Lorraine Health Tea, one of our specialties; secondly, to exploit any other of our preparations by making the gift contingent on their purchase.

The cups and saucers were very pretty, being the kind usually sold at twenty-five and thirty-five cents in the Japanese stores. We bought them from a local jobber for fourteen dollars a gross in a four-gross quantity. We

neatly wrapped with each cup and saucer an envelope specially printed for the purpose, containing a liberal sample of Lorraine Tea.

Then we had printed several thousand circulars describing and explaining the offer. Our method of distributing them was to send out our two delivery boys, having them make a house-to-house canvass within a radius of twelve to fifteen blocks of our store. They did not throw the circulars into alleys and under door-steps, but delivered them personally, usually to the madam of the house, with the brief remark, "This is a message to you from your druggist, Mr. Schertz."

Any errand boy can do this work intelligently, and it is a good deal cheaper than the mail. Furthermore, the chances of the circular being read are better. A few were mailed to customers residing at a great distance, first-class postage being used.

The next feature was the window display. Our window is a large one, and the display consisted entirely of packages of the tea and the cups and saucers which we were giving away as premiums. In the center of the window two large show-cards 22x28 inches were shown, duplicating as near as possible the cir-

culars distributed. Some of the empty cartons of the preparations were attached with glue to the card marked "Our Specialties," making a very striking display.

Then in the store, signs which I made extolling the merits of our preparations were in evidence on every hand. One home-made stand with a large card marked "Our Specialties" displayed plainly seventeen different preparations.

To the special preparation made for this sale, including the use of much printers' ink, window display and store display, was added the enthusiastic effort of our sales force.

We gave away in two weeks four gross of the cups. The sale would have been a success had no purchases been made of more than twenty-five cents, although they averaged considerably above this amount.

The results of this sale were many. I sum them up as follows: Every man's efficiency has been increased, his salesmanship developed. Samples were distributed where nine out of ten will be used. Lastly, we made many new friends for the various preparations bought, giving a cumulative result impossible to estimate but which we see proof of every day.



A DRUGGIST'S MARDI GRAS FLOAT.—This illustration shows a float arranged by Roy S. Warnack and his fellow clerks for participation in the New Orleans Mardi Gras last winter. The men are dressed as Lorraine Guards. The famous Joan of Arc is mounted on horseback, while the Duchess of Lorraine rides in the chariot. Clad in this carnival uniform, and liberally equipped with samples, they made their specialty, "Lorrainets," conspicuous in the merchants' parade.

RELIEVING THE CROWDED CELLAR.

**How Congestion May Be Avoided in the Basement—Arranging Containers Systematically—
Labeling Them Plainly—Getting Rid of Contaminated or Useless Receptacles—
How to Build the Shelving—Other Pointers.**

**By J. F. RUPERT,
U. S. Navy, Hospital Corps.**

The drug business is carried on in crowded quarters. Whatever be the condition in front, the back room will be found congested. The basement, too, is overburdened. Especially is this so in stores selling the proverbial paints, oils, and varnishes in connection with drugs, soda water, cigars, and stationery.

In our rush and hurry to make "quick sales and small profits," we are very apt to jam things onto shelves or set them on the floor of the basement. While this practice often saves time in a rush, if articles are left in that condition we soon find things "all balled up."

With a little elbow grease and energy we can often better matters. The overhead space in the basement can be used for suspending many articles, thus placing them out of the way, removing them from danger of breakage and from the dampness of the floor, and placing them in a readily accessible location.

Long spikes can be driven into the beams at proper intervals. Then clean jugs and cans, such as syrup and liquor containers and alcohol cans, can be kept in one location. Other receptacles which have contained medicines or drugs that unfit them as containers for medicines intended for internal use can be kept in a distinctly separate place.

Clean jugs I have always labeled "clean" with a string tag. Such products as hydrochloric acid, linseed oil, formaldehyde, ammonia, etc., I have always labeled with the name of the last article contained. This plan removes all question as to the condition of the containers and prevents contaminations due to the use of old containers.

The practice of smelling a jug is a slow and uncertain method of determining its fitness for certain uses. Jugs and cans should be thoroughly cleansed, inside and outside, before storing. Old labels should be removed, and if any corks have been pressed into the jugs they should be removed. Inserting a loop of a strong cord and inverting the jug

does the trick. One had better first make certain that no water remains in the jug unless he does not object to having his neck irrigated.

Cans should be thoroughly dried by placing them over the furnace or radiator or other warm place, and jugs should be thoroughly drained. The reason is to prevent rusting inside of cans and to avoid trouble when liquids immiscible with water are dispensed. More than all this, every jug or bottle after cleansing should be securely corked with a good stopper. This saves time when needed and prevents the ingress of dust and insects.

CELLAR NO PLACE FOR JUNK!

Too much junk is stored in some basements. The basement and back room should be kept thoroughly overhauled at all times. Worthless stuff should be burned or hauled away. Old leaky cans, broken glass and jugs, old boxes and barrels and excelsior, ashes, kegs, and what-not do not grow into wealth and are often the cause of starting and spreading of fires. Empty oil barrels and liquor kegs can always be sold to butchers, oil and grease dealers. Farmers also are on the lookout for these articles. If no market can be found for them, a little "ad" in the local papers will often open the way. Farmer customers are always glad to remove boxes, barrels and lumber that cannot be burned in the summer or otherwise disposed of at any time. Barrels and kegs easily dry out and fall together if left in a dry place for some time.

The basement should be thoroughly swept up at least once weekly after sprinkling.

Shelves can be easily built suspended from the ceiling and used to store liquors and syrups in jugs or bottles, mineral waters, paints, patents, ink, empties, and what-not. Syrup, liquors and other stock can all be stored overhead by attaching a tag on a long string. This makes it easy to find the article wanted.

Kegs and barrels should be assembled and kept on racks. Metal tanks into which barrel contents are pumped as received will prove more satisfactory, requiring less storage room, less heavy labor, no waste by overflow of measure and leakage from jammed barrels, and preventing what often happens: the breaking off of the faucet or "gate," sometimes resulting in the loss of the entire contents of the barrel.

Liquor barrels and kegs should be kept covered with damp cloths to prevent evaporation. This is often considerable, especially in a warm dry place where sales are slow.

Bins should be securely built to store coal and ashes and should have all cracks closed to lessen the dust nuisance.

LABEL ALL CONTAINERS.

Every article in the basement should be distinctly labeled in black on large white placards, as the light is usually poor. This label should be transferred to full packages when empties are removed and the date and price and source of the article of invoice should be continued on the card. This readily informs one how much of that article is used, year by year, shows the difference in prices and from whom purchased. If liquids are dispensed from barrels and kegs, on this white label should also be tallied the amounts drawn off at various times. This is especially convenient for the close buyers. It also tells who supplied the goods when complaints become necessary.

Empty prescription bottles should be stacked so as to allow ready access, and the various sizes should be distinctly labeled as indicated. This assists the boy to distinguish a three- or four-ounce from a four- or six-ounce.

More than one dollar has been lost by rushing into the basement, digging into a box for a bottle of mineral water, finding it is the wrong box, dropping and breaking the bottle in a hurry to get at the article wanted. All this is prevented by a distinct label.

Heavy packages should be stored as near the elevator as possible, other things being favorable, to prevent much heavy work. Elevators should be built-in with some judgment when the building is erected. I have seen elevators facing exactly the wrong direction, necessitating dragging everything around the corner, when it would have been exactly as convenient and no more expensive to build it right. It was simply done without thought.

ATMOSPHERIC CONDITIONS.

Articles should be stored with some consideration of the local condition in the basement and the properties of the substance stored. Glauber salts and sal soda will "melt" if kept in too damp a place, while paint cans will rust under the same conditions and some articles will mold. Light has a harmful influence on inks and colored articles such as crepe or tissue paper. Altogether, a dry dark basement is better than a basement with too much sunlight, and a damp condition will be favorable to storing a few articles, such as paint brushes and sponges.

Containers should be raised more or less from the floor and should not touch the walls. If a furnace is fired in the basement room, inflammable liquids and matter easily ignited should be moved as far as possible from danger. A clear gangway should be left sufficiently wide to allow the rolling of a barrel.

The stock properly stored in the basement will depend entirely on local conditions. Glass had better be stored in a bright, light place as it is a delicate article to handle. The scales should also be placed in a well illuminated location. Drugs to be weighed should be placed conveniently.

Ventilation should be arranged for and assiduously attended to.

OLD BOTTLES.

I do not allow old bottles to collect, but in case it is found that many have accumulated "here and there and everywhere," they should all be gathered together and the various sizes sorted into bins. These old bottles should be thoroughly cleaned and can be used to dispense varnish, oils, carbolic acid, gasoline, ammonia, wood-alcohol, shellac, liniments, etc. Many of these articles should be kept "put up" and neatly labeled ready for sale. A number of old bottles of various sizes should be always kept ready for use to dispense liquids meant for external or commercial use. Odd sized bottles should have the price marked on the labels in code to insure charging the same price if the bottle is returned to be refilled.

Five-pint and gallon bottles can be kept cleaned and stoppered and may also be suspended by cords to the ever-faithful overhead beams.

Cash register and typewriter cases, etc., which may never again be used, but which if

destroyed would be wanted, can be permanently fastened to the beams overhead with a few nails and box lumber.

Lockers containing paints and paint specialties should be distinctly labeled on the outside.

This systematized arrangement of the basement will not only greatly assist in rapidly and properly caring for the trade, but will prove most convenient for the information of new clerks when changes in the help are made.

HOW THE COCAINE TRAFFIC IS CONDUCTED.

A Typical Chicago Case Unearthed after Seven Years of Protection from the Police—A Shanty in the Red Light District Used as Headquarters—As Many as 500 Customers Served Daily.

The way in which cocaine sellers are protected in their nefarious traffic in the leading cities is well illustrated by an exceedingly interesting report from the Illinois State Board of Pharmacy. Chicago has evidently been



This was the house of Eugene Hustion, 2511 Dearborn Street, Chicago, who carried on a prosperous business in "dope" for seven years under the protection of the police. His disreputable customers came to the back door for the stuff.

going through for a year what New York has been experiencing ever since the Rosenthal murder. In New York it has been found that practically all forms of vice and gambling are protected by the police—for a consideration. In Chicago the same thing was suspected last year, and Mayor Harrison thereupon requested the Civil Service Commission of that city to investigate the facts.

THE COCAINE TRAFFIC IN CHICAGO.

What the Commission found with reference to the cocaine traffic is of particular interest to the drug trade. Approximately 50 places were discovered where cocaine and other narcotics

were being sold unlawfully; conclusive evidence against 35 of them was secured; and over 100 persons were arrested. Practically all of these people had formerly been protected by the police, and in one flagrant case, that of a man who frequently sold as many as 500 fiends in one day, the police had collected as much as \$3000 a year for hush money. This particular offender was never arrested by the police, and when two or three outside organizations procured evidence against him, small fines of \$25.00 and \$50.00 were imposed—fines which he laughed at as mere jokes.

Finally, when the Civil Service Commission discovered the facts, and prosecuted this dope



This picture shows the rear of Hustion's house. Note the beaten path through the snow made by customers traveling from the alley to the back door. Observe also the exceedingly suggestive sign on the fence: "Coal and wood coke."

seller to the limit, he was sentenced to six months in the House of Correction and assessed with fines aggregating \$800. Until the Commission began its work in connection with the narcotic traffic, indeed, not a single sen-

tence of imprisonment under the cocaine law had ever been imposed since the passage of the act.

A STRIKING CASE.

The history of this man's operations, and of the manner in which he was finally apprehended, is given in the annual report of the State Board of Pharmacy, and we are going to print it in full because of its deep and dramatic interest. Before doing so, however, we want to make it clear that the man was not a druggist, so that his sins and offenses are not to be charged up against the profession of pharmacy. Furthermore, we do not find that any of the other sinners caught by the Civil Service Commission or by the Illinois Board of Pharmacy were members of our calling. Several druggists in the dope district were un-



This is a living room in Hustion's house. Every bit of available space is filled with goods and furniture which had been received in exchange for cocaine. One "fiend," a promising young man recently married, had practically traded off all of his house furniture, piece by piece, in order to get "coke."

der suspicion, but apparently no direct evidence was obtained against them.

The records of a wholesale druggist in Chicago showed, however, that during the year he had sold to a retail druggist, just across the State line in Indiana, 150 ounces of cocaine, a good portion of which, it was thought, had found its way back into Chicago to supply the needs of illicit sellers. A licensed physician, too, was arrested red-handed in the sale of two ounces of cocaine to a degenerate negro retailer of the drug, and admitted the purchase from a reputable wholesale and retail druggist of over 30 ounces in a single month.

And now for the story of the dope seller who was protected for seven years by the po-

lice, and who sold "coke" to hundreds of customers daily:

A TYPICAL COCAINE "PLANT."

The most typical of the cases investigated in Chicago is that of Eugene Hustion, a diminutive negro.

For the past four years, and up to the time he commenced a sentence in the House of Correction for the illegal sale of cocaine, Hustion resided in a one-story and basement frame cottage at 2511 South Dearborn Street, Chicago, and in that house conducted an extensive business in the sale of cocaine, morphine, opium, and other drugs. He and his wife, Lottie Hustion, a full-blooded Indian of the Cherokee tribe, as well as inmates of the house, were all users of cocaine, and Hustion himself was an opium smoker.

The majority of Hustion's customers were served through the kitchen door. They were not permitted to come into the house, but were compelled to stand on a covered back porch, screened from the street, and the door chain was always kept fastened so that the door could be opened only a short distance.

The investigators observed as many as sixty persons going to the back door during a period of about one and one-half hours, and Hustion testified that the number of customers coming to his house was as high as four or five hundred daily.

RAMIFICATIONS OF THE TRAFFIC.

The sale of cocaine to these people was ordinarily in small quantities, the usual amount being four grains, costing Hustion about four cents, and retailing at twenty-five cents. In addition he had what he called his "automobile trade," and also testified that he personally delivered cocaine and morphine at the homes of wealthy women in the residential district of the south side. He had peddlers in his employ who found their customers in the south side vice district, and also made deliveries by means of messenger boys.

Hustion testified that he had been arrested a number of times and had been fined frequently. The records, however, show that during the year 1911 he was fined but twice prior to the time the Civil Service Commission's investigation of the Department of Police commenced. The first time was in June, 1911, when a complaint was made by a civic organization to the Chief of Police that one of its investigators had purchased cocaine of Hustion. The chief directed the lieutenant in command to take steps to stop the sale. The steps taken were to arrest Hustion and secure a \$25 fine. Later the Board of Pharmacy secured evidence against Hustion, and he was fined \$100.

PAYING THE POLICE FOR PROTECTION.

The investigators learned of the existence of Hustion's place about the middle of November, 1911, and made their first purchase on November 17, 1911. The house was thereafter kept under more or less strict surveillance. A number of other purchases were made, and on December 15 Hustion was placed under arrest and his home raided. In it was found 33 ounces of cocaine, together with scales, weights, and containers for dispensing the same. On the same day Hustion made a complete statement to representatives of the

commission, in which he said he had been operating for seven years and that he had paid members of the police department an average of \$3000 per annum for protection. He subsequently went upon the witness stand during the trial of certain police officers, including the commanding officer of the precinct in which he resided, and repeated his testimony without contradiction. He was not cross-examined, nor was any effort made to disprove or impeach his testimony.

One thing, however, was concealed by him—the names of the policemen to whom he had paid protection money. This he would not divulge, stating that he had given his word and would keep it.

After his release on bail he started to sell again, and the investigators made a number of purchases at his home, but all of these purchases were not made from Hustion direct. Warrants were sworn out against him in four cases.

IN THE MESHES.

The first case against him was called on December 16. Hustion demanded a jury trial, and the case was continued to December 29 and assigned to Judge Dolan. On December 30 his case was again continued to January 17, and on that date he was tried before a jury and found guilty. A motion for a new trial was made and set for hearing on January 20. Later a second case against Hustion was tried before a jury, resulting in a verdict of guilty, sentence being reserved until the two other cases against him were set for trial.

By this time both Hustion and his lawyer saw that his former tactics would be of no avail, and he pleaded guilty to one additional charge. In the two cases tried by jury he was fined \$300 each, and in the case where he pleaded guilty Judge Fry sentenced him to six months in the House of Correction and fined him \$200, making the aggregate fines \$800.

Details of the cases against Hustion are given to illustrate the trouble and delay to be expected in cases of cocaine selling where the dealer is supplied with money.

Some time in August, 1911, Hustion purchased a stolen automobile from a well-known sneak thief and pickpocket, who told the fact to a west side police officer; men from the Desplaines Street station made a raid upon Hustion's house, secured the automobile, and took away eighteen or twenty dress-suit cases supposedly containing stolen goods.

TWO RAIDS.

Hustion claimed that among other things taken at that time was a large quantity of cocaine and Gray's Catarrh Remedy, which was never returned to him. This was denied by the officers making the raid, and inasmuch as no inventory was made of the property taken, and he subsequently receipted in full for all of the property alleged to have been taken in the raid (except the automobile), the fact could not be proved that the police had taken and resold the cocaine, as he claimed.

On the complaint of several railroad special agents, Hustion's place was again raided on October 3, 1911. At this time a quantity of watches, jewelry, opium, and other property was taken by the police. Hustion again claimed they took quantities of cocaine from him, but that has not been verified. He further claimed that

the amount of opium taken from him was nine cans, valued at \$85 per can, and that when the opium was turned over to the United States Government by one of the officers making the raid but six cans remained. It was conclusively proved that Hustion's statement in this regard was correct and that this officer had removed three cans of opium from the package. What became of it has not been learned.

SOURCES OF SUPPLY.

Every effort was made to ascertain from Hustion his source of supply. He admitted that he had purchased Gray's Catarrh Remedy (which contains cocaine) at the rate of five gross per month from a dealer in Jersey City. Some of his memoranda indicated that he had dealings with a well-known retail drug company, but that could not be verified.

Hustion finally admitted that for about a year previous to his conviction he had purchased cocaine from a man who was formerly manager of a well-known wholesale drug house in another State, and that in eight or nine months had purchased \$3000 worth, or 600 ounces. He usually purchased it in 100-ounce lots. This would make his average sales about 66⅔ ounces per month.

DISTRESSING RESULTS OF DRUG HABITUATION.

Hustion's case illustrates two phases of the pernicious character of the cocaine habit—first, its inimical connection with crime, and second, the moral breakdown of the user. The striking contrast between the exterior and interior of Hustion's home illustrates both these phases. The luxurious furnishings were practically all received by him in exchange for the drug. One promising young man but recently married, living in an apartment comfortably furnished by the parents of his wife, took practically every bit of these furnishings, piece by piece, to Hustion's house and traded them in for cocaine at a fraction of their value.

In one corner of the kitchen there were stacked carpenters' and plumbers' tools and tools of other skilled mechanics; hanging in masses on the backs of nearly every door and in closets were expensive silk and satin dresses, furs and linens; scattered through the house were dress-suit cases and boxes containing wearing apparel, jewelry, watches, and goods of every description. Neither Hustion nor his wife knew how much property there was in the house, but a person well qualified to judge and who examined it at the time of the second raid made by the police, stated that in his opinion the value of the property in the house at that time was nearly \$15,000. A good portion of this property was undoubtedly stolen, as cocaine users, being absolutely unreliable, can never get steady employment, and naturally turn to theft. Among the regular patrons of Hustion's place were a number of well-known pickpockets and other thieves.

It ought to be explained, perhaps, that the work of discovering and prosecuting this and other offenders was done by the Chicago Civil Service Commission instead of the State Board of Pharmacy, because the latter had no funds with which to operate.

"MY BEST PAYING SIDE-LINE."

The Eighth of an Important Series of Articles by Different Druggists, in which Each Writer Tells what Class of Goods Has Paid Him Best—Post-cards were Found Most Remunerative by this Proprietor.

**By A. E. PRATT,
Waukon, Iowa.**

Some years ago when post-cards had quite a sale in the cities but had not yet found their way to the smaller places, my wife said to me, "Why do you not put them in as a side-line in your store?" I replied, "I consider it a very short-lived fad and I do not care to bother with it." But I was persuaded to put in a few and try them out.

SCATTERING MY PURCHASES.

Very much to my surprise they sold quickly, and it was up to me to decide whether I cared to continue the card business or not. Luckily I jumped the right way. I immediately got busy studying the ways and means whereby I could replenish my stock quickly with suitable and salable goods. It did not take me long to discover that the true secret of the post-card business was in having a well-selected stock which necessitated frequent purchases and not too many of one design. As there were other firms in town selling cards, I felt that I must at once impress the public with my desire to keep on top in the card business. I therefore devised the plan of scattering my purchases far and wide, thereby obtaining the new and attractive cards as they came out. The complimentary remarks that frequently came to my ears from customers regarding my ever new and changing assortment convinced me that this plan was correct. I bought cards not only in Chicago and other near-by points, but also in New York City, Philadelphia, St. Louis, Louisville, Topeka, and Denver.

RECORD OF SALES.

As time went on I became more and more enthusiastic over my new side-line, feeling that it was just about the best I ever took up. In fact, it became so fascinating that I decided I would keep a weekly record of sales. At the close of my first year my record was \$907.25, which means an average weekly sale of \$17.50, and an average daily sale of \$2.93.

My second year was \$783.03, with an aver-

age weekly sale of \$15.06 and an average of \$2.50 a day.

My third year was \$602.02, with an average weekly sale of \$11.58 and an average of \$1.92 a day.

My fourth year was \$548.91, with an average weekly sale of \$10.55 and a daily average of \$1.43.

It will at once be observed that there was a dropping off in sales from the first record-breaking year which can be accounted for in two or three ways. In the first place, there were more places in town selling cards. Then, too, in my first year or two in the card business, there were a good many novelties retailing at 5, 10, and 25 cents. Leather cards, in the days of leather pillows and purses, were in the height of their sale. These retailed at 5 cents, and together with the novelties helped to swell the volume of business. But notwithstanding the dropping off in the business, I still consider it a good substantial side-line for any druggist.

I found that it brought hundreds of customers to my store who might not have come but for the fact that they knew they could always find the largest and best selection of postals at my store to be had in this corner of the State. The figures I mentioned would be nothing for some dealers. But for me, considering the town and my situation, the showing was fine.

I have the honor of having sold \$3841.21 worth of cards in four years, which means an output of from 100,000 to 110,000 cards, and I know that no other dealer in my county can make the same claim.

This output was carried on continuously on an average investment of about \$50. My average profit has been about 100 per cent. So it will be seen that the profit has paid my rental.

HOW TO HANDLE CARDS.

My method of handling cards is somewhat different from that of the average dealer. It

differs too from that suggested by the card jobber, being more like the department store plan. About one-half of a twelve-foot showcase is covered with local views, each assortment being held together by a rubber band. I have a row of wire baskets; first one containing 10-cent birthday cards; next one holding 5-cent birthdays; then the 2-for-5-cent miscellaneous, and 3-for-5-cent miscellaneous. Then comes my 1-cent basket.

PENNY CARDS.

I know it is quite contrary to the business belief of many dealers to handle penny cards, for the reason that they hurt the sale on the higher priced subjects. While this may be so to some extent, I must say penny cards have their advantages, especially in a town in which there is a so-called "racket store." In the first place a penny basket is one of the best drawing cards one can have for his store. Secondly, one can put the unsalable and soiled cards into the 1-cent basket with the assurance that they will not be there long.

In using the wire basket system one must not neglect placing a good-sized price-card at the head of each basket so that customers though "deaf and dumb" may read.

For display I use the ordinary card racks and hang them over the card counter, full of the new cards. These I change real often, at least once a week. Frequent window displays serve to keep the people interested and also help to show them the new cards.

Let me say right here that *never* should a suggestive card be allowed in the stock. Consign them all to the fire.

There are three days in the year when card sales can be doubled and quadrupled if the proper forethought is taken to lay in a good salable stock. I refer to Easter, Christmas, and New Years.

Cards to retail at 2 for 5 cents are by far the best to handle. They can be bought at from \$1 to \$1.25 a hundred, and can be sold at 25 cents a dozen, leaving a good margin.

I advise everybody to get in and become acquainted with "my very best side-line."

WHY SOME DRUGGISTS DON'T MAKE MORE MONEY.*

By HARRY B. MASON,
Editor of the "Bulletin of Pharmacy."

In an address which I have recently prepared at the request of another association, but which has not yet been delivered, I have shown in detail how strikingly at variance druggists are in the incomes derived from their stores.† I have presented the actual facts about 25 druggists who are scattered in different sections, and who therefore represent the average conditions as they are found over the country. The percentage expense of these men runs from 18 to 35! Their percentage of gross profit runs from 31 to 51! Often one man realizes a total income as large as another whose volume of business is nearly twice as great!

Now why do these discrepancies exist? Why does it cost some men so much more

than it does others to do business? Why do some men realize a profit so much less than others? Why does one druggist make so much more money than his neighbor on a business of exactly the same size?

The answer to all these questions is simple. Locality and environment have something to do with the problem, it is true, but in the last analysis, and in the great majority of instances, the fundamental reason is that some druggists are poor business men—that's all. They don't study the game. They haven't mastered the rules. They aren't skilful in playing their cards, and—worse yet—they make one blunder after another without ever knowing it.

Now what are some of these blunders?

1. *They don't keep business accounts.* This is the day of science in commercial operations, when every large business house, in whatever line of trade, is making a close study of business economics, and yet many druggists are nevertheless following the good old-fashioned

*Address delivered by invitation before the Chicago Branch of the American Pharmaceutical Association, May 21, 1912.

†This has since been read before the Iowa Pharmaceutical Association and printed in the September BULLETIN OF PHARMACY.

method or lack of method of spending what accumulates in the bank account and fancying that it represents net profits. Hundreds of such men have discovered when it was too late that they were eating up their principal without knowing it, and that accumulated dead stock, decreasing inventories, and bad book accounts had cut into their imagined profits so far as almost to destroy them entirely. The sheriff has had to come along and close them up before they tumbled to the situation. A druggist who does not keep careful business records is not in position to know anything at all about the amount of money he is actually making. He is simply asleep at the switch.

2. *They don't take inventories.* The druggist who does keep business records, but who fails to supplement them with annual inventories, isn't much better off. In Philadelphia not long ago two brothers bought a store which had previously enjoyed a very good trade, and which was pretty well stocked. The first year the new owners thought they were making all kinds of money. They increased their living expenses and plumed themselves with the thought that they had finally landed on their feet. Over a year went by, perhaps indeed two years, before it began to dawn on them that they had been gradually decreasing the stock in the store, and that much of the money which they thought they had been making as profit was literally taken out of their capital. An inventory would have prevented them from making this mistake.

A druggist in Missouri, who submitted his business statement to us for two or three years in succession, was finally induced to begin invoicing his stock annually. What was the result? He discovered the very first year that his assets increased to the extent of \$1600. If he had taken no inventory, and if he had based his calculations upon purchases and sales alone, his figures would have been grossly inaccurate. To be sure this particular druggist would have erred on the safe side, but the very next year the situation might have been approximately reversed.

More striking yet was the case of an Arizona drug firm from which we received a statement indicating net profits during the year of \$1256.31. The inventory had been taken, but it had not been figured up and compared with that of the year before. When we received

the inventory figures for both years, and carefully went over the entire statement again, we found that this Arizona firm, instead of making a net profit of \$1256.31 during the year, had actually lost \$716.60!

Instances like these might be multiplied—but what's the use! As I have said on other occasions, I have been brought in contact with numerous cases where the inventory figures have disclosed differences in the value of the stock to the extent of anywhere from \$200 to \$2000, according to the size of the store and the nature of the circumstances. The stock in any store is constantly shifting; the prices are forever fluctuating; the fixtures, and particularly the soda fountain and its appurtenances, are always undergoing depreciation, and the druggist who is not aware of the exact nature and extent of these changes is not in position to know where he stands. He may fancy his percentage of gross profit to be 40 when in fact it is only 30, and he may consequently be losing money on many transactions which he fondly believes are yielding him good returns.

3. *They don't know how to figure profits.* There are many druggists who do keep business records, and also take inventories, but who blunder strangely in the calculation of profits. A very common mistake is to figure the percentage expense of doing business on the volume of sales, which is right, and then to figure the profit, not in the same way on the selling price, but *on the cost*. It is true that ordinarily, in every-day language, profit estimates are based on the cost price. This is the method we are taught in school, and it is the method most frequently met with in the advertising announcements of manufacturers. A manufacturer, for instance, who sells you an article at \$1.00, the retail price of which is \$1.75, will tell you that you are making 75 per cent profit. This is legitimate and right, but the wise merchant must thoroughly realize under such circumstances that *he is considering a profit based solely on cost*, and when he comes to apply the figures in his own business, *he must understand the necessity of converting them to the other system and basing them on the selling price*.

Expenses are nearly always estimated from sales—this is almost a universal custom. If, therefore, the profits are to be compared with the expenses, they must both be figured by the

same method. Suppose you pay \$1.00 for a certain product and you desire to make 35 per cent on it gross. It costs you 25 per cent, we may assume, to do business. You want to make a 10 per cent net profit beyond that for yourself. Very well, then, what should the selling price be on this article which costs you \$1.00, and on which you want to make a gross profit of 35 per cent? If you make the common mistake of basing this 35 per cent on the *cost* price you will sell the article for \$1.35, but if you do let us see how you will come out. It will cost you, as we have already assumed, 25 per cent of the *selling* price to handle the article. Now 25 per cent of \$1.35, the price you place on the product, is 34.75 cents, so that you are selling for \$1.35 an article which cost you \$1.34¾, and while you flatter yourself that you are making a net profit of 10 per cent, you are practically breaking even on the transaction!

There are hundreds of merchants—perhaps thousands of them—who are figuring their profits in this erroneous manner. Some months ago the Burroughs Adding Machine Co. published an advertisement in one of the national magazines requesting answers to the following question: "A certain article costs \$1.00 wholesale. What will it have to be sold for to allow a net profit of 10 per cent, after allowing 22 per cent for the cost of doing business?" Something like 1000 replies were received, of which 750 were wrong. The answers ranged all the way from \$1.10 to \$1.60. The majority gave the selling price as \$1.32, notwithstanding the fact that an explanation was printed at the bottom of the advertisement declaring this answer to be incorrect. The very common mistake was made by these men of basing their percentage expense upon the selling price, their percentage of profit on the cost price, and expecting they would get accurate results. This was the whole source of the trouble.

Here is the proper way to tackle a problem of this character: The article costs \$1.00. Your cost of doing business is 22 per cent, and you want to make a net profit beyond that of 10 per cent—a total of 32 per cent. The cost figure of \$1.00, therefore, represents 68 per cent of the final selling price. Is this perfectly clear? Suppose, again, your expense is 40 per cent, and you want to make a net profit of 10

per cent. You would then have to realize a total profit on the selling price of 50 per cent. Now considering 100 per cent as the final price you get, and subtracting 50 per cent of this for profit, you have left a residuum of 50 per cent for cost, and the \$1.00 which you pay for the article therefore represents 50 per cent of your selling price. You must consequently double the cost and sell the article for \$2.00 if you want to realize your 40 per cent of expense and your 10 per cent of net profit.

Reverting now to the first example which I mentioned, that of an article which costs \$1.00, and on which it is desired to make 35 per cent gross, it may be seen right away that the cost is 65 per cent of the desired selling price. Your problem may then be stated as follows:

$$\$1.00 : 65 :: X : 100,$$

and the answer is \$1.54. Instead, therefore, of selling the article for \$1.35, you sell it for 19 cents beyond that. And this 19 cents means just the difference between making money and losing it. It means the difference between figuring profits correctly and figuring them incorrectly. It means the difference between ignorance and wisdom.

In this connection a few rules may be of assistance. In order to make a profit of 16⅔ per cent of the sale price, add 20 per cent to the cost; for a 20-per-cent profit add 25 per cent; for a 25-per-cent profit add 33⅓ per cent; for a 33⅓-per-cent profit add 50 per cent; for a 40-per-cent profit add 67 per cent; for a 50-per-cent profit add 100 per cent.

4. *They lose money without knowing it.* Partly because of the inaccurate method of figuring profits which I have just been considering, and partly because department records are not kept, many druggists fail to realize a profit on some of their goods. It is pretty well known that patent medicines, for instance, bought at 68 cents and sold at 80 or 85 cents, very frequently fail to reimburse the druggist even for his cost of doing business, to say nothing of yielding net profits. But it is less frequently known that sometimes even the candy and cigar departments are poor profit makers.

Some years ago we had a statement from a druggist in the West whose annual business amounted to a little over \$16,000. He kept careful department records and he found that

his annual soda sales were nearly \$4000, his cigar sales over \$6000, and his candy sales something like \$1600. The soda business yielded him a gross profit of 35 per cent, the cigar business 16 per cent, and the candy business 25 per cent. Now his percentage expense was 28, and it was even 23 when, for purposes of calculation purely, his own salary as proprietor had been eliminated. He found, therefore, that he was losing money on his cigar business. Without considering his own salary at all as part of his expense, he was still losing 7 per cent, failing by this margin to make any profit whatever toward his own living, letting alone the question of surplus profits. Even his candy business, netting a profit of 25 per cent, lost money for him. It paid a little toward his salary, it is true, but it failed to measure up to his total real expense of 28 per cent.

I haven't any doubt at all that much the same thing would be true of many drug stores throughout the country. It doesn't follow, however, that because a given line is failing to yield adequate profits, it should be thrown overboard. When I read a paper on this subject before the Michigan State Pharmaceutical Association last year I was taken severely to task by one or two speakers who misinterpreted my position. They assumed my argument to be that goods which didn't yield a profit shouldn't be carried in stock. They declared with perfect truth that it costs more to sell some goods than it does others. A patent medicine, for instance, which can be quickly wrapped and passed out over the counter can probably be handled for one-third the expense of a prescription. Much the same thing is true of cigars, which are sold with a good deal of rapidity. It is therefore scarcely fair to charge up against such things the average percentage expense of the whole business.

Furthermore, some things have to be carried even if they do lose money. This is noticeably true of patent medicines. It may even be true with cigars and candy, for if you throw out a given department, and put nothing else in its place, you are reducing your volume of sales and thereby increasing your volume of expense. You are therefore jumping from the frying pan into the fire. Charles H. McConnell, proprietor of the Economical Drug Store in this city, whose daily sales exceed a thousand

dollars, found many years ago that his soda and cigar departments were actually losing money for him, and he promptly abandoned them. But it was possible for this aggressive man, with a fine down-town location, to take a radical step of this kind when it is frequently not possible for a small druggist in an outlying suburb. Mr. McConnell was able to keep up and even increase his volume of sales by a more energetic drive on other features of his business, but this the small druggist cannot always do.

Some one might reply, then, what's the use of all this talk if we must keep our departments anyway? A lot of use! Every man ought to know the facts about his business. In the first place, if he finds that his candy department isn't yielding adequate profits, he can change the selling prices, or the character of the goods, in such manner as to come out whole on the business, and he can perhaps find leaks and stop them up. The same thing is true to a limited extent with the cigar department. In the second place, if a druggist realizes that he is making a low profit on a good many things in his store, he then understands the vital necessity of putting in such additional lines, and of getting such increased profits elsewhere, as will bring up his *general average* of profit. It must be obvious to every merchant that as *few* goods as possible should be sold at a gross profit below the percentage expense, and as *many* as possible above it. By no other rule can a satisfactory average be yielded. If it is necessary to carry a lot of stuff that pays indifferently, the thing to do is to expend a little gray matter in planning to put in other things that will pay handsomely and bring up the average.

5. *They don't keep the percentage of expense and the percentage of gross profit far enough apart.* This shortcoming grows out of what has been said already. I found from the statements of the 25 druggists to whom reference has been made that the average percentage of expense was $24\frac{1}{2}$, and the average percentage of gross profit 38 $\frac{3}{4}$. This means, in round numbers, an average *net* profit of 14 per cent. Every druggist should strive to keep his percentage of expense and his percentage of gross profit this distance apart from one another. Make your business yield 14 per cent net on the average if you can. Hold this up to your-

self as an eminently attainable ideal and strive in every way to realize it. Others have done it—you can. Don't be satisfied with anything less. If you are, then you fall to this extent below the general average reached by druggists throughout the country.

It is my conviction that the net profit ought never to fall below 10 per cent at the worst. Anything between this figure and the general average of 14 per cent might possibly be considered fairly satisfactory. But if 10 per cent is not realized, then the business needs to be looked into most carefully. Throw the searchlight on it in every detail. Conduct an investigation of the most earnest character—and don't neglect to appoint yourself your own most heartless and ruthless critic.

The difficulty of the problem must not be minimized. In striving for an average gross profit of 38 per cent—one might better make it 40 while he is at it—it will be found that many things will have to be marked up to a selling price once, twice, and occasionally three times the cost price. As Charles R. Sherman, the shrewd pharmaceutical merchant of Omaha, once said: "One of the most important points in the conduct of a business is knowing where to put the profit on, and while 20-per-cent profit would be all the traffic would bear in some instances, 80 or possibly 120 per cent on another article would seem no more burdensome to the purchaser and would really be just as legitimate."

It must be understood that 40 per cent on the selling price is the equivalent of 67 per cent on the cost price, and that in realizing an advance of 67 per cent over the cost of an article, you are putting on "all the traffic will bear" in many cases. But since this is to be your *average* profit, and not your *maximum* profit, and since you have to sell a lot of things at 15 or 20 per cent, you must summon up your nerve and tack on the advances wherever the weight can be borne. This is positively the only way you can break even. Remember this finally: If it costs you 25 per cent to do business, which is the general average the country over for retail druggists, this is equivalent to $33\frac{1}{3}$ per cent on the cost figures. When, therefore, you buy an article for \$1.00, and sell it for $\$1.33\frac{1}{3}$, you are simply paying expenses and haven't made a cent! Don't forget this—it's a good thing to remember!

A selling price of $\$1.33\frac{1}{3}$ on an article costing you \$1.00 hasn't netted you anything!

6. *They don't take advantage of their cash discounts.* Few druggists realize how much money they can save by availing themselves of cash discounts as they should, nor do they comprehend thoroughly that if they can cut down the cost of their goods in this manner they are certainly adding that much to what is yielded by them on sale. In a paper read last year I gave the facts about seven pharmacists who had always made it a practice to discount all their bills. The annual amounts saved by them were as follows: \$150, \$186, \$301.26, \$600, \$600, \$1000, \$5000. Since that time two or three other druggists have written me about this feature of their business. A physician out West, who owns a drug store but who hires a manager to conduct it, told me that with a business of about \$10,000 a year he was saving on an average \$150 annually by discounting all his bills. In his case this meant an enlargement of the total net profit realized from the business of something like 8 per cent! In another case, that of a Michigan druggist, \$196 was saved last year in cash discounts. A saving of \$196 a year is equivalent to the net profits on sales amounting to \$1500 or \$2000—in other words, one would have to increase his business to this extent to make as much money as he can make without any trouble whatsoever by merely taking advantage of his cash discounts. And yet druggist after druggist goes to sleep on this opportunity, and pays anywhere from 1 to 4 or in some instances 6 per cent more for his goods than he should.

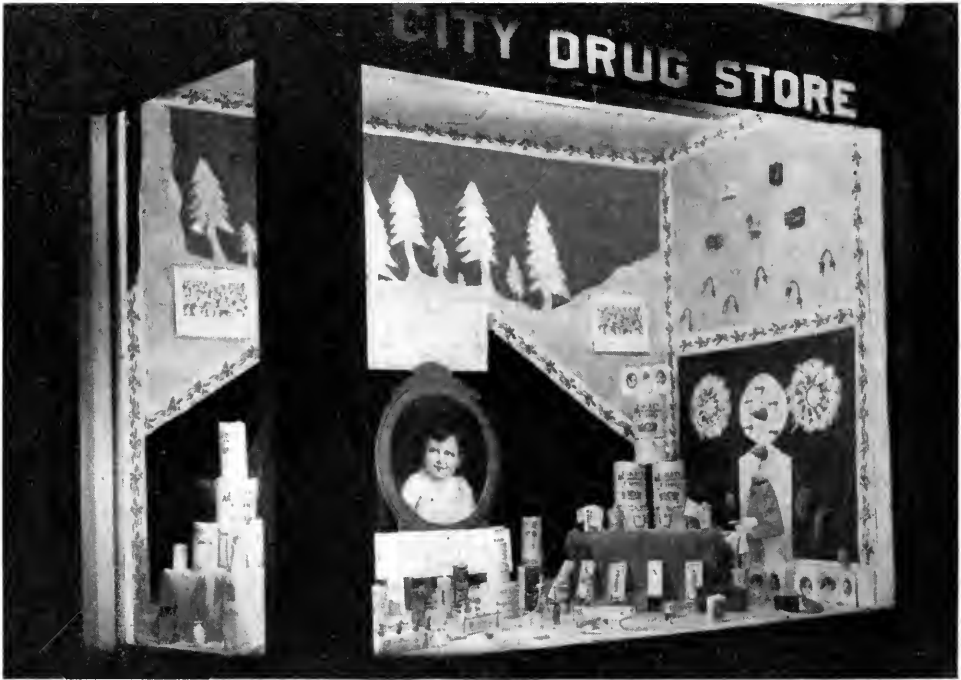
These are a few of the reasons why some druggists don't make more money. I haven't tried to exhaust the whole catalogue of shortcomings—but I have already talked long enough. Neither do I mean to suggest for a minute that druggists are any worse than other retail merchants. They aren't. But I am convinced in my own mind that as a class they do not make that close economic study of their business which the times demand. They are scientific pharmacists—but they are not scientific business men. Modern business is just as much of a science as astronomy or biology or engineering. The old loose and slipshod methods won't go—we are either up-to-date or out-of-date.

A DISPLAY OF BABY NEEDS.

By J. EARL TAYLOR, Ph.G.,
Gridley, Illinois.

Some time ago we tried the plan of filling the window with the different articles intended for infant use. In the center, mounted on an easel, appeared the picture of a bright, healthy looking baby. A sign just below read, "The picture of health—an Eskay's Food Baby."

The upper background was heavy green in-grain paper worked over the lower border with heavy white paper. The latter was cut away to represent an outline of evergreen trees. The side wall was green above and red below. All over the edges of the background



Around the youngster were arranged an assortment of all the things he might want. There were nursing-bottle fittings, nipples, pacifiers, brushes, chamois skins, talcums, soaps, bottles, assorted baby foods, castor oil tasteless, ear and ulcer syringes, vermifuges, antiphlogistine, castoria, croup remedy, etc.

and the side wall appeared a narrow border of holly.

This trim caused considerable comment and brought us some good sales on the articles displayed.

Others could doubtless try this plan to good advantage.



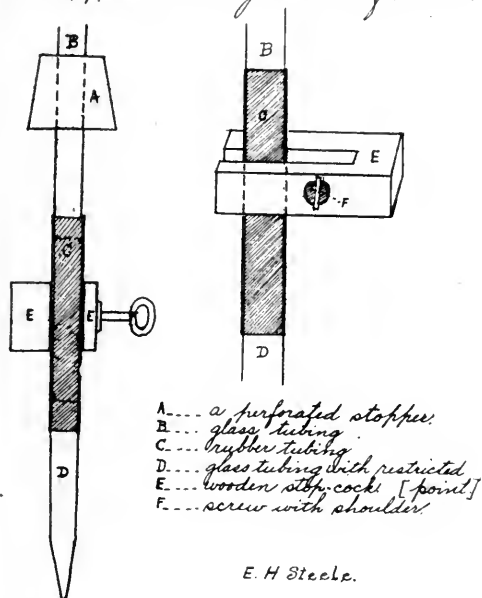
DOLLAR IDEAS

REGULATING THE FLOW OF A PERCOLATOR.

E. H. Steele, Washington, D. C.: Here is a diagram of an apparatus designed to regulate the flow of the percolate in the manufacture of tinctures, fluidextracts, etc. It serves the purpose so efficiently, and is so simple, inexpensive, and easily constructed that I thought it not altogether unworthy of a place in your columns.

It consists of six simple parts. There are a perforated cork or rubber stopper, a short

An Apparatus to Regulate Flow of Percolate



piece of glass tubing to fit same, a short piece of rubber tubing that will fit snugly over end of the glass tubing at one end and receive a glass tube with constricted point at the other. An ordinary eye-dropper answers admirably for the latter tube. Astride the rubber tubing is a wooden stop-cock with screw. This furnishes a means of regulating the flow to as few or many drops per minute as desired, by simply tightening or releasing the screw.

The stop-cock is fitted with a screw having a shoulder, and is made from a small block of tough wood by sawing in from one end a sufficient distance to accommodate the rubber tubing and allow the screw to be inserted behind it. The incision should be made sufficiently close to the side of the block to render the outer portions susceptible to the influence

of the screw. In other words, the outer portion must be thin enough to spring readily.

If tough wood is not obtainable, an ordinary piece may be used and fortified with a wire wrapped tightly around the closed end.

TO TELL CUSTOMERS "WE HAVE IT NOW."

C. J. Wall, Grapevine, Texas: I submit a printed postal card I have used for several years to great advantage. When a customer calls for an article that I am out of temporarily,

GRAPEVINE, TEXAS.

DEAR FRIEND:

A few days ago you called for

which I was then temporarily out of. I now have it in stock and would be pleased to furnish it to you.

Yours truly,

C. J. WALL,

Druggist.

What You Want, When You Want It!

ly, or have not been carrying, I take his name and order the article. When it arrives I drop the buyer this post-card, and it usually brings him back for the goods. The card used is an ordinary government post-card printed on the back as shown, with a blank left for the name of the article.

MAKE THE BANK BOOK SHOW!

Daisy A. Frick, Audubon, Iowa: The bank deposits should represent the cash taken in. It is frequently customary to pay small bills out of the cash drawer instead of writing checks. But I aim to pay all bills by check, although there are still many occasions when it is advisable to pay the cash out of the drawer—for example, express charges, dray and messenger fees, etc. At the end of the day sum up total expenditures of the kind and replace the amount with a check, depositing it the same as cash. This makes the bank-book show the total amount of cash business.

ACIDS IN PERFUME BOTTLES.

Lester E. Lenrow, Newark, N. J.: One-pound perfume bottles with glass stoppers make excellent acid bottles for shelf use. After gathering together a sufficiently large number and filling them with the different acids from our stock, we were more than repaid for our trouble by the convenience of having a neat set of uniform shelf bottles that could be handled with great ease.

LETTERS

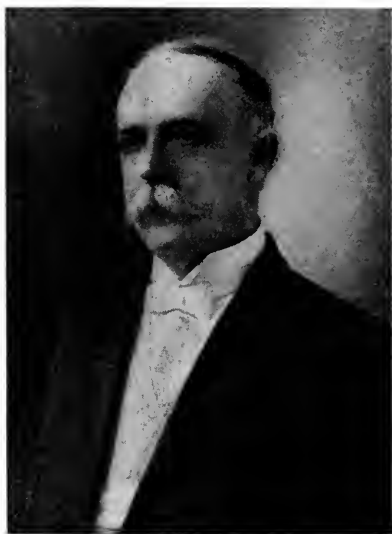
This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

COMMISSIONS IN THE NAVY SECURED AT LAST!

To the Editors:

The rank of Chief Pharmacist with commission in the United States Navy is now an assured fact. Those eligible for promotion are merely awaiting the order to appear for examination. We quote from a letter just received from one of the navy pharmacists:

"Anything like an adequate expression of our thanks for your long, hard fight in our behalf is, I think, beyond the ability of any



Dr. Geo. F. Payne.

of us, and I, for one, shall not attempt it. I shall merely say that the pharmacists in general, and especially those of us who have been long enough in the service to know of your work from the beginning, appreciate what you have done for us, and that on my part the somewhat feeble expression 'I thank you' is all that I will use at this time. The duty of the American Pharmaceutical Association to the pharmacists of the naval service is, in my opinion, done and well done, and the credit of the same is all yours."

The credit isn't all ours by a long shot. Hurrah for the pharmacists of the American Pharmaceutical Association, and their brother

pharmacists of the whole United States, who have battled so unflinchingly for proper recognition in the United States public service! Everybody almost without exception did his duty by his profession when called upon by the chairman. We wish that we could thank everybody adequately. Many exerted a powerful influence by their interest and good-will when they did not realize the amount of their efficient work. We thank everybody heartily and sincerely, and wish that we were able to give the whole bunch a trip through every State in the Union to further help the coöperative work of promoting the professional advancement of pharmacy. Respectfully,

GEORGE F. PAYNE.

Chairman of the Committee of the A. Ph. A. on the Status of Pharmacists in the Public Service of the United States, Atlanta, Ga.

ANOTHER PUZZLER!

To the Editors:

One night a young man came into the store and handed me this note. Being unable to speak English, he left me in a rather peculiar position. What would you dispense? I dispensed two dozen of P., D. & Co.'s 2-grain Phenolphthalein Tablets and wrote upon the

*Please give this lady
some kind of Pills
for germ killing in
a person*

box: "Take two pills each evening before retiring as needed." I am inclined to think that he wanted something of this nature as I haven't seen him since.

Let me say finally that the BULLETIN contains more up-to-date reading matter than any other drug journal I know of.

Detroit, Mich.

MAHLON K. SMITH.

WHAT HE WOULD CHARGE.

To the Editors:

In the September issue of the BULLETIN, in the department of "Letters" on page 389, I noticed the following prescription:

Sulphonah 1 drachm.

Divide into 5 powders.

The druggist who submitted this prescrip-

tion asked for suggestions regarding the price of it. I thought it would be of some interest to him and to the editors of the BULLETIN to hear from me, and therefore let me say that I would ask about 25 cents for such an order.

FRANK FRIDGEN.

La Crosse, Wis.

REGARDING TWO ARTICLES IN THE SEPTEMBER BULLETIN.

To the Editors:

Your correspondent from Oakland, California, whose letter was reproduced on page 389 of the BULLETIN last month, should have lived in the South. If he had been so fortunate of location as to live almost anywhere in this part of the country he would have had no trouble whatever in knowing that "Black and Tan" is a copaiba mixture used largely by the colored population for purposes which are doubtless known to all pharmacists!

I observe, too, that the E. D. Co. ask on page 396 of the September BULLETIN about a dye for shaving-brushes. Let me suggest the following: Wash the shaving-brush first in benzine, then immerse the bristles in a 5-per-cent solution of potassium sulphuret, and, after drying them thoroughly, in a 10-per-cent solution of silver nitrate, subsequently exposing the brush to bright sunlight until it is dry. It will then be found to be a beautiful jet-

black. A high luster may be obtained by rubbing it with a very small quantity of vaselin. Care, however, should be taken to keep the hands out of the different liquids by means of the use of tissue-paper.

Complimenting the BULLETIN OF PHARMACY on its several excellent and interesting features, I am, very truly yours,

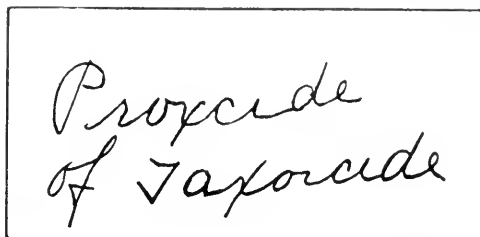
Glencoe, Okla.

W. SCOTT SAMUEL.

WHAT DID HE WANT?

To the Editors:

I am sending you an order received not long ago in this store, and I wonder if most drug-



gists could tell what the man wanted. We found that he was after hydrogen peroxide.

Lodi, Cal.

SAM H. ZIMMERMAN.

To the Editors:

Your drug journal is certainly the best I have ever read.

HENRY J. KAMPHUIS.

Fulton, Ill.



A GRADUATING CLASS IN PHARMACY.—These young men got their diplomas this spring from the Department of Pharmacy of the University College of Medicine in Richmond, Va. The school has just moved into a new fireproof building, modern in equipment, and the outlook for larger classes and wider influence is reported by Secretary Wortley F. Rudd to be very bright.

THE SODA FOUNTAIN.

USING SIGNS AND WINDOW CARDS.*

BY STERLING MILLER.

Here is my experience on "How to Operate a Small Soda Fountain on a Money-making Basis." The first step to take to operate a small fountain on a money-making basis is to employ a neat, clean, bright-looking person. Most likely he will ask his desired salary; offer him a little more, and you will find he will be delighted and take more interest in his work and the sales will increase at your small fountain. As the business increases give him a little more salary or a small commission for the busy season, and in a short time you will find that you will have to employ extra help.

To advertise your sodas, frappes, sundaes and specials, have plenty of fancy cards suspended from your fountain back-bar. Make a new drink or an ice-cream delicacy every day, and you will find your patrons will look and ask for something new each time they call at your fountain. Have some attractive and fun-making cards for your customers to comment on and laugh about. Suspend from the back-bar designs in this manner:

WILKES-BARRE SUNDAE,
10c.
One Actress,
One Johnny,
One Taxicab,
One Supper Mingled with Cocktails,
Two Down-and-Outs!

A GOOD DEAL
for 15 Cents.
EUCHRE FRAPPE.

Display
a good
Euchre
Hand.

IT IS A CHESTNUT,
but it is a good one.
Try it To-day as our
FOUNTAIN SPECIAL.

On all big days such as holidays have a special window sign appropriate for the occasion, printed in this manner: "Circus Frappe," "Baseball Frappe," "Football Frappe," "4th July Sundae," "Christmas Snowball Frappe," and "Easter Sundae." This will arouse the curiosity of the dainty-seekers and bring the crowds to your store.

When buying your fruits and syrups, buy in small quantities, so they will always keep fresh and delicious; always keep one or more bowls of fresh fruits on the back-bar, such as fresh pineapple, fresh strawberries, etc., in season; have plenty of fresh eggs in sight with a printed card "Strictly Fresh Eggs Used at our Fountain."

Never contradict your customer. If he says the milk in his egg drink tastes sour, don't say you don't think it is, because you just received it from the dairy. Instead, offer him something else or return his money. The

chances are he will see you are trying to please and ask for something else.

Serve some nice dainty cake with your ice-cream sundaes and frappes. This will bring you many steady customers. Make your soda and ice-cream concoctions neat in appearance. Always have a large bowl of orangeade on your fountain counter, for this is very appetizing and a big money-maker. Make your fancy concoctions in front of your customers and this will help to advertise them. Specials lettered in water-colors on the mirrors will help sell them. Always try and have something new and different at your fountain.

Have a nice bouquet of flowers on your back-bar. Two or three palms or ferns are always attractive at the fountain or near-by; and a punch bowl of fresh fruit in the center of your back-bar filled with lemons, oranges, bananas, peaches, etc. Keep your soda glass holders polished as well as the soda fountain. Use the best ice cream that is made in your city or town, and this will help to advertise your business.

A neatly decorated window of fruits, syrups, and fresh fruits should be on display in your store window about once a month. Keep your counter and tables clear of all unclean glasses and dishes—dishes which in many cases will spoil the appetite of your customers. The profits of your fountain can easily be thrown away by using excessive ice cream, syrups, and fruits.

Have a neat menu on your tables and counter. Change the menu card every day so that it is always clean. There is nothing more offensive than a menu all spotted with soda water. In printing your menus have a line at the bottom reading in this manner:

Special To-day,

CANTALOUPE FRAPPE, 15c.

Always make a special effort in catering to the women trade, as in general they all like something dainty and tasteful.

"Sweets for the Sweet."

During the winter months serve a nice line of hot drinks, such as hot chocolate, tomato bouillon, etc., serving each with two or three fancy cakes or crackers. This is also a drawing card for your fountain during the cold weather.

Three years ago I was employed by H. C. Tuck & Co. to build up a soda trade at their fountain, which had been lingering along with small sales and profits for several years. The first day I went behind the fountain I made cards and strips for the back-bar and windows stating that our delicious sodas are 5 cents, sundaes and frappes 10 cents, etc. In a short time the sales of our fountain began to increase day by day. Then more help was the next step to take care of the trade. To-day I have a money-making fountain, gained by using the above methods. I find by reading *The Soda Fountain* magazine each month any person interested in the soda business will find a great deal of knowledge on how to operate a "Small Fountain on a Money-making Basis."

IT PAYS TO KEEP ACCOUNT OF COSTS.

There is little need of argument to convince those who have been through the experience that it pays to keep cost accounts, even in the soda business. Accounts well kept stop leaks, but they do more than that, by

*This article was awarded a prize of \$10 by *The Soda Fountain*.

presenting suggestions for the enlargement of business. In keeping a soda-water cost account, one should make note of the weather, the special occasion, such as holidays, local excursions and the like, and other data that are likely to be valuable in making comparisons.

By stopping leaks, we mean, for instance, that the cost sheet should show whether you are getting all you ought to from each gallon of ice cream. Let us suppose that last Friday averaged \$2.10 a gallon for the ice cream consumed, while yesterday's was \$2.75 a gallon, with the total volume of business so nearly the same that mere volume could not have made the striking difference. An inquiry is started at once. A deficiency in refrigeration is developed and checked in time—or perhaps it is the quality of the cream when it is delivered to you. At any rate the inquiry is set on foot, which is the principal thing. For it is a poor business man who can't find out where a leak is when once his attention has been called to it.

A little additional pains, that need not be taken every day, but once in a while may afford an excellent test, is to keep an exact account of the number of drinks of each kind sold. This requires a good deal of special preparation, but is worth the trouble, say, once a month. It gives one a better "line" on his trade than anything else can do. It shows just what drinks are making the "hits," and to the observing man it ought to almost tell why. And this ought to point the way to enlarging in the more profitable directions.

SOME STARTLING COMPARISONS.

It is well known that the higher priced drinks yield a higher percentage of profit than the lower priced ones. Sixty per cent, say, of the checks of a day's business may be five-cent ones, yet they will produce less than 40 per cent of the income from sales. Thirty per cent may be ten-cent checks, yet it will be discovered that they produced 43 per cent of the gross business. And the business of the higher priced checks was accomplished with little, if any, additional charge for attendance. Service time runs about equal, or very little more, in the higher priced business. In a typical cost sheet we have in mind, it was found that it required seven times the service in the case of five-cent customers to produce only a little more than twice the gross receipts that accrued from sales of ten cents and over. The disclosure of the relation of the service cost to the amount of the check is important, not only for the additional profit it ought to call attention to, in possibility, but because it gives incentive for a development highly desirable from every business point of view.

ADVANTAGES OF KEEPING ACCURATE ACCOUNTS.

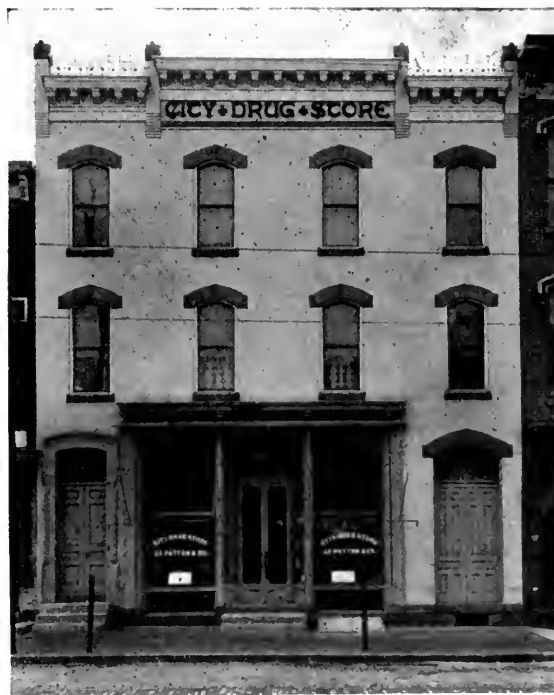
If comparing one week with another and one month with another are desirable practices, then it will be found, too, that the comparison of days in different years will pay, when the system has become established. For example, when the record of one year shows that the introduction of hot sodas in November accomplished the double result of increasing the sales over those of April and of doing it with less consumption of ice cream, the lesson for the following season will be obvious.

The aim should be to get full returns for the stock

handled, to study the needs and demands of the trade, and to check income and outgo, with the purpose of maintaining the highest possible standard of efficiency, and to stop leaks and prevent their recurrence. To accomplish these results the accounting system should above all be accurate. Let it start with the record of sales at the fountain. This should be a résumé of the five and ten cent and the special checks classified according to kind. It should show the amount of ice cream consumed and the average returns per gallon of cream. Other facts not easily deducible should be kept in the record.

The daily account of deliveries should show the quantity of every article or commodity entering into the daily business that is bought and enters the store. The relative proportions of syrups, of non-ice-cream dishes of various kinds, of fruit, of egg drinks, should be carefully ascertained and recorded from day to day; and a knowledge of how to read the delivery sheet in connection with the fountain record will be the means of stopping many a leak that perhaps could not be detected in any other way. For under average conditions of accurate dispensing there will be little variation, and this one item presents suggestions that it is important for the proprietor to heed.

Only by keeping accounts carefully, and then paying attention to the lessons they convey, can the owner of a fountain hope to keep his finger on the pulse of his business.—*The Pacific Drug Review*.



THE PHARMACY OF JOHN F. PATTON.—Everybody knows who John F. Patton is. He has always been conspicuous in pharmaceutical affairs in the State of Pennsylvania, and some years ago he was president of the American Pharmaceutical Association. He is one of the leading citizens of the town of York, Pennsylvania, and his store is of course located in that city. Mr. Patton is unmarried, and his bachelor quarters over the store are the envy and discomfort of many a willing dame.

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Scientific Scintillations.—

Ultraviolet light may be used to detect traces of sulphide in potassium carbonate. It develops a red luminescence in the sulphide.

Ozone is said to be of value in ventilation on account of its smell and its action on the nerves of the skin, but not on account of any specially healthful properties it imparts of itself.

A mixture of "sodium peranhydrosulphate" and of "chloride of peroxide of sodium" is claimed as an efficient sterilizer of drinking-water, in the proportion of one part to five million of water.

Light decomposes solutions of vanillin, forming dehydro-vanillin, which is less soluble and may deposit. The decomposition is only partial.

Terpin hydrate is formed when a mixture of oil of turpentine, alcohol, and nitric acid is exposed to ultraviolet light rays, and a patent protects its manufacture in this way.

A Frenchman has patented a machine for expressing the oil and the juice from lemons in one operation and collecting them separately.

Colloidal solutions of silicates of lime and aluminum are being employed to decolorize mineral and fatty oils. They are very effective.

Hydrofluoric acid, or acid solution of a soluble fluoride, is recommended for removing iron stains from fabrics.

An English patentee mixes one part of the roasted sprouts of malt with about 30 parts of tea in order to improve the flavor and digestive value of the latter.

The medicinal value of many natural medicinal waters, for bathing as well as for drinking, is now ascribed chiefly to radium emanations in the waters. These emanations are found in most of the famous European waters.

A mixture of one part of lemon oil and two parts of boiled linseed oil is recommended as an efficient furniture polish which applied sparingly "will do more to preserve good furniture than any veneer sold."

Distilled water contains enough bacteria to produce marked irritation and a rise of temperature when the bacteria are killed and the water is injected into the veins or muscles. Use only fresh distilled water for preparing solutions for injection.

Animals whose respiratory and alimentary tracts are kept sterile do not live long though the food is assimilated. The normal bacteria appear to promote oxidation processes which are necessary to life, and destruction of these bacteria brings death of the animal.

Tannin in plants prevents the development of fungous disease, and so protects the plant. In small amounts it appears to stimulate growth of the plant and fruits, but in large amounts it inhibits.

An Italian chemist finds that an anti-pepsin exists in the pig's stomach which under certain conditions arrests digestion completely, and thus accounts for the non-

digestion of the stomach. He was not able to isolate this body.

The whites of eggs contain on an average 87.7 per cent of water and 11.89 per cent of organic matter. The yolks contain 49.7 per cent water and 48.8 per cent organic matter, the rest being salts. Both contain a small proportion of sugar—the yolks less than the whites.

In a storage bin containing 1000 tons of raw sugar fermentation occurred in the center and generated enough heat to cause explosion and flame. Only certain forms of fermentation bacteria will generate enough heat to do this.

An apparatus for sterilizing water by ultraviolet rays which can be fitted to any water tap has been perfected in Germany. From 2 to 3 quarts per hour of absolutely sterile water are obtained by it, with an ordinary electric current.

At the Royal Institute there is a sample of colloidal gold made 55 years ago by Faraday, in which there is no sign of settling. The explanation is that the suspended particles are so small that their rate of falling is only about 0.4 inch per year, and that is offset by circulation through temperature changes in the liquid.

Dr. F. Gardner finds from experiments on guinea-pigs that olive and cedar oils penetrate the skin the best of the liquid oils, while goose grease comes first in the list of fats, with benzoated lard second.

An examination of twelve different brands of gelatin sold for food in Germany disclosed arsenic in each, though in very minute amounts. The arsenic comes from arsenic sulphide used in treating the leather from which gelatin is made.

Odds and Ends.—

Metallic thorium is stated to have a stimulating or tonic effect on animal life, but an injurious action on vegetable life, except in very minute amounts.

Camolite, a mineral found in Colorado, Utah, and New Mexico, is a promising source of radium, and it is thought will prove a profitable source of that element.

Gasoline is now being obtained from natural gas by freezing it out. As much as 13 gallons have been obtained from 1000 cubic feet of gas, but the yield is variable.

Botanists claim that the cultivation of plants which contain toxic principles tends to reduce these and to finally evolve a plant which contains none. Cultivated medicinal plants are therefore less valuable than the wild.

The London *Lancet* says that beer acts as a condiment, and aids in the assimilation of food, when taken with meals, resembling beef tea in this respect. In addition about four-fifths of the extracts in beer are themselves assimilated.

Adrenalin increases the anesthetic action of cocaine, of novocaine, and of alypin.

When given food which had been completely extracted with alcohol and ether, mice died in about two weeks. The addition of fats did not remedy this, but lecithin and cholesterol did.

Large doses of radium emanation cause a destruction of some of the white corpuscles of the blood, an excessive excretion of uric acid, a disturbance of metabolism, and irritation of the nervous system.

Osmotic Observations.—

R. R. Bennet, Ph.L., says that hypodermic solutions and eye-washes should always be made isotonic (non-osmotic) to be soothing instead of irritating. A solution of cocaine hydrochloride containing 0.594 Gm. of the salt in 10 Cc. is isotonic, also one containing 0.564 Gm. of quinine bilydrochloride in 10 Cc. A solution of morphine hydrochloride containing 0.37 Gm. in 10 Cc. is not isotonic, but can be made so by adding 0.268 Gm. of glucose. Sodium chloride is not suitable because it tends to cause crystallization. A solution of 0.01 Gm. strychnine hydrochloride in 10 Cc. should have 0.079 Gm. of sodium chloride or 0.442 Gm. of glucose added to make it isotonic. Beta-eucaine hydrochloride, 0.2-per-cent solution, requires 0.82 Gm. sodium chloride per 100 Cc., and a 0.5-per-cent solution of novocaine requires the same. When glycerin is used, 1.75 Cc. of glycerin diluted to 100 Cc. is isotonic. Anything stronger than this is hypertonic and may irritate. Mr. Bennet thinks that remedies for external use, when they come in contact with membranes, as the eyes, abraded surfaces, etc., should be made isotonic so that osmosis will not cause irritation.

"E Pluribus Unum."—

Alcohol is obtained in France chiefly from grapes or beetroots, in Greece from currants, in Germany from cherries or potatoes, in Russia from rye, in Japan from rice, in the United States from corn, in Mexico from molasses or agave. Other sources of industrial alcohol are bananas, pineapples or other fruits which are unfit for market, artichokes, sweet potatoes, and certain leaves which are rich in starchy or saccharine juices. In 1905 over 600,000 gallons of alcohol were distilled from apples in the United States. It is thought that the stalks of sweet corn would make a profitable source of alcohol in connection with canning factories.

Ye Olde Tyme Wisdom.—

In the old-fashioned days comfrey was esteemed as a household remedy, but modern science found no use for it until Dr. Macalister of England showed that it acts as a real stimulant and proliferant to the cells, and that it exercises powerful healing properties. He finds it of value in ulcers, gastralgia, pruritus, etc., and equally useful internally or externally. This action is found to be due to allantoin, which exists to the extent of nearly 1 per cent in the root.

Arsenic Internally.—

Arsenic is found to be a common constituent of vegetables, and is present in most varieties, of course in very minute quantities only. Of 36 vegetables examined by Jadin and Astruc, split peas contained the largest proportion—0.026 milligramme in 100 grammes—with spinach a close second. Of the fruits, apples contained the most—about twice as much as split peas—while pineapples and bananas contained the least.

Easy on Elbows, Hard on Clothing.—

Washing powders containing sodium perborate are very effective for producing white linen, but the perborate is found to rapidly destroy the cloth. Tests show

that when 10 per cent of perborate is present in the powder, linen loses 20 to 40 per cent of its strength in one washing, cotton a little more, and woollens 15 per cent to complete destruction. Very thin goods are practically destroyed in one washing.

"Made in Germany."—

Artificial building materials, composed of sawdust or cork-waste cemented into boards or blocks with a solution of magnesium chloride to which magnesium oxide is added, the mixture being pressed into form, have proved very successful in Germany. The combination possesses some of the qualities of both wood and stone, and is useful for floors, roofs, wainscoting, etc.

Patented Immunity.—

A Swiss chemist claims to be able to make a chemical antitoxin which is capable of conferring immunity against infectious diseases, from creatinine. A patented solution contains 0.2 per cent of creatinine, 0.01 per cent of guanidine, and 0.10 per cent of allantoin, with 0.08 per cent of phenol as preservative.

Electrified Calcination.—

Lime and magnesia which have been prepared in electrical furnaces at very high temperatures, have very different properties than when prepared in combustion furnaces. They are more resistant to changes by hydration or carbonation, and are specially adapted to use as furnace-linings.

Dose—One Meal Three Times a Day.—

Dr. F. S. Gordon says that the best way to take alteratives is in the form of vegetables and fruits. Spinach and apples contain the most iron; milk, cabbage, lentils, and cheese the most lime; cod-liver oil and fish the most iodine; and milk, eggs, and fish the most phosphates.

Quinine Tannate.—

Professor Puckner questions the value of quinine tannate because of its variability. Its composition depends largely upon the formula and method by which it is made, and it should contain 30 per cent of quinine, but often contains less. One sample examined contained a quarter of its quinine uncombined, and was not, therefore, tasteless.

A New Cork.—

A plant which grows abundantly in the Philippines (*Fagara integrifoliola*) has a fibrous covering on its roots which is chemically similar to cork, and which when pressed into form makes a good substitute for cork. It is known as "root cotton" and promises some technical uses of value.

No Action When Dry.—

Calcium carbide is recommended as a caustic in the treatment of cancers, ulcers, malignant skin diseases, etc. It is said to act only on the discharging surface provided that the rest of the skin with which it is in contact is kept dry.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Clockmakers' Oils.

P. B. D. writes: "Please give me a formula of an oil for lubricating fine machinery such as clocks and motors for piano players."

Lubricants for clocks and delicately constructed machinery in general are usually prepared from very carefully refined rape oil, or, preferably, fine olive oil. To remove the final traces of acid from the oil it is shaken with one per cent by weight of caustic soda, this being repeated several times daily for two or three days. A large volume of water is then added, and the supernatant oil, which is now quite free from acid, is poured off. It, however, still contains coloring matters and certain other constituents inimical to lubrication, and to remove these the oil is shaken up with strong alcohol, which dissolves them out. For this purpose, 10 parts by volume of the oil are placed in a clear glass bottle holding about one-third as much again, along with 2 parts of 90-per-cent alcohol. The bottle is next well corked, and shaken up so as to thoroughly mix the oil and the spirit. The bottle is set out in the sun, and shaking repeated several times a day. At the end of about three weeks—though in bright summer weather ten to fourteen days often suffice—the oil will be water-white, the supernatant layer of spirit having assumed a strong yellow tinge through the coloring matter absorbed from the oil. The purified oil is siphoned off and filled at once into small, tightly corked glass bottles, which should be kept in a cool, dark place. The spirit can be recovered by careful distillation, in a perfectly colorless condition, and used over again.

The mineral oil for clockmakers' use is a specially refined heavy tar oil. One hundred parts of ordinary heavy tar oil are treated with two parts of bleaching powder, well stirred in, and followed by 3 parts of crude hydrochloric acid. The mixture must then be vigorously stirred, and set aside for six hours. At the end of this time the oil is poured off from the watery liquid, and repeatedly shaken up with 5 parts of caustic soda lye each time. Finally, the refined oil is filtered through gray blotting-paper.

Olive oil is also used by clockmakers as a lubricant. An olive oil must be obtained that has been refined by the sulphuric-acid method, very well known, and afterward shaken up with about 2 per cent of weak lye to insure the complete elimination of the final traces of free acid. The oil and lye are left in contact for

several days after a thorough shaking, the oil floating on the surface being then drawn off and bleached with spirits, as described above. Like all other fine lubricating oils, the olive oil so treated must be filled into small bottles, which are then tightly corked and stored with care.

Shoe Polishes.

M. J. S.—Formulas for liquid shoe polishes appeared in this department of the BULLETIN last month. Shoe pastes may be made after the following formulas:

- (1) Marseilles soap122 parts.
Potassium carbonate61 parts.
Beeswax500 parts.
Water2000 parts.

Mix and boil together with occasional stirring until a smooth, homogeneous paste is obtained; then add, a little at a time, and under constant stirring, the following:

- Rock candy, powdered.....153 parts.
Gum arabic, powdered.....61 parts.
Ivory black1000 parts.

Stir until homogeneous, then pour, while still hot, into boxes.

- (2)* Soap122 parts.
Potassium carbonate61 parts.
Beeswax500 parts.
Water2000 parts.

Mix and boil together until a smooth, homogeneous paste is obtained; then add

- Boneblack1000 parts.
Powdered sugar153 parts.
Powdered gum arabic.....61 parts.

Mix thoroughly, remove from the fire, and pour while still hot into boxes.

(3) Shoe pastes or polishes are mixtures of yellow wax and turpentine, varying in proportion as to the hardness of paste desired and the season of the year involved. Summer weather requires the use of more wax than winter weather.

The pastes are colored with ivory black and alcoholic solutions of aniline—orange, brown, and red. Sometimes palm oil is used. For a starter try wax, 1 part, and turpentine, 3 parts. Melt on a water-bath and stir in the color desired. If palm oil is used, employ about 25 per cent.

Polishes for Silverware.

B. L. K.—F. C. Hottel, of Cleveland, Ohio, makes a polish for cleaning silverware which is very satisfactory:

Shave up one large cake of ivory soap and dissolve it in 20 ounces of water. Add 2 ounces of glycerin, mix thoroughly, and then gradually add 1 pound of English precipitated chalk. Stir the mixture thoroughly, and then add 1 ounce of potassium cyanide which has been previously dissolved in 6 ounces of water. Mix again.

This polish is very cheap to make. The following is also a good formula:

- Chalk, levigated 2 parts.
Oil of turpentine..... 4 parts.
Stronger ammonia water..... 4 parts.
Water10 parts.

Mix the ammonia and oil of turpentine by agitation, and rub up the chalk in the mixture. Finally rub in the water gradually or mix by agitation.

A Medical Query.

F. S. writes: "A friend of mine has a sallow complexion, covered with many pimples and blackheads. I have given him different medicines, such as calcium sulphide tablets, blood purifiers, and salves, but without results. What would you suggest?"

Consult a dermatologist. Skin affections try the skill of trained physicians, and we don't feel competent

to prescribe for them. If there is any anemia, that must be corrected. If the liver is sluggish, it must be stimulated. Local treatment may also be necessary. If the case is acne, bacterial vaccines are indicated. If there is any blood disease present, it, too, must be cured. But only a physician can tell the real cause of the trouble.

A White Capping Mixture for Bottles.

J. S. P. writes: "Can you tell me how to prepare a sealing preparation? I want something that is tough and strong, but stays pliable." J. D. C. asks the same question.

In "350 Dollar Ideas for Druggists" will be found a formula suggested by Crawford T. Ruff of Montgomery, Alabama. The mixture is especially fine for capping toilet preparations:

Melt 8 ounces of white wax over a spirit lamp. For this purpose the wax may be put in any cheap tin or porcelain vessel with a handle. When the wax is melted, add 2 drachms of thick mucilage of tragacanth and 1 ounce of bismuth subnitrate. Stir briskly until a uniform mixture results. The preparation is now ready for use. Dip the necks of the stoppered bottles in to the desired depth. The substance will congeal almost immediately. Repeat this operation about three times and you will have a beautiful white cap—firm, yet easily removed. During the capping process the mixture must be stirred and held over the lamp from time to time.

Nickel-plating for Brass Auto Parts.

G. E. D. writes: "Will you kindly publish a formula of a preparation to be applied to brass to give it a silver or nickel coating? I want a preparation for use on auto brass parts."

A similar query was answered on page 218 of the May BULLETIN this year. The querist wanted to know the process for nickel-plating brass trimmings and lamps on automobiles permanently. Suppose you consult the information which we gave at that time, as we hesitate to republish that material so soon afterwards.

"Liver Spots."

W. A. B. writes: "A friend of mine, incidentally a customer of the store, wants a remedy for brown spots



PROFESSOR DIEHL AS A GRANDFATHER.—C. Lewis Diehl, the well-known teacher, pharmacist and N. F. reviser, is seen enjoying the philosophic observations of his little grandchild at the Professor's home in Louisville.

on the arms and chest. He has tried a solution of sodium hyposulphite, but as soon as he stopped using this remedy the spots came back. I would like to know if there is any positive cure."

These so-called "liver spots" are a pigmentation of the skin. Some form of iodine given internally is the only remedy that we can suggest. Skin specialists give arsenic. Hydrogen peroxide and sodium hyposulphite are used locally. Suppose you consult a physician. We hardly feel competent to suggest a remedy for this persistent trouble.

Polish for Brass.

W. M. H.—Here are two preparations for polishing brass:

- (1) Oxalic acid 2 ounces av.
Pumice stone, powder..... 4 ounces av.
Water, enough to make..... 16 fluidounces.

1. Dissolve the acid in the water previous to adding the pumice. Apply, after shaking, with a rag, and polish with a second dry woolen rag.

2. Dip the article in a mixture of 2 parts of common nitric acid and 1 part of sulphuric acid, contained in a stone jar. The articles, after being dipped in this mixture, are thoroughly washed with water and then rubbed with dry sawdust. A solution of oxalic acid is used in the same way. Smooth surfaces being rubbed with prepared chalk, or equal parts of the latter (or whiting) and oxalic acid, made into a paste with water, may be applied. A great many other processes are employed, such as rubbing with rottenstone and sweet oil, and then with whiting; this is particularly effective with copper articles.

Solution of Iron Peptonate and Manganese.

F. J. A. wants a formula for making solution of iron peptonate and manganese. A formula appears on page 88 of the National Formulary:

Ferric peptonate	45 Gm.
Soluble manganese citrate.....	8 Gm.
Ammonia water (U. S. P.).....	13 Cc.
Aromatic elixir (U. S. P.).....	50 Cc.
Alcohol	150 Cc.
Distilled water, a sufficient quantity to make	1000 Cc.

Dissolve the ferric peptonate in 250 Cc. of distilled water, add the ammonia water, and then the alcohol. Dissolve the



A QUINTET OF DETROITERS.—This group of Detroit druggists was photographed in August at the convention in Muskegon, Mich., where the two State organizations were amalgamated into the new Michigan State Pharmaceutical Association. Reading from the left the men are: J. H. Webster, F. W. R. Perry, Charles F. Mann, Grant W. Stevens, and James W. Seeley.

manganese citrate in 100 Cc. of distilled water, and add it to the first solution. Then add the aromatic elixir, and enough distilled water to make 1000 Cc. of solution. If manganese peptonate is available, 26 Gm. of this may be used in place of the soluble manganese citrate directed in the foregoing formula.

To Clean Nickel-plated Goods.

W. M. H.—A paste for polishing nickel may be made by mixing chalk with tallow.

1. To clean nickel-plated goods, nickel platers use ordinary rouge. The following mixture is said to be excellent: Take equal parts of precipitated iron carbonate and prepared chalk, or take quicksilver with chalk $\frac{1}{2}$ ounce, and prepared chalk 2 ounces; mix them. When used, add a small quantity of alcohol and rub with chamois leather.

2. Rub the article with a little fresh lard or lard oil, on a wash leather or piece of buckskin. Rub the bright parts, using as little of the rouge and oil as possible; wipe off with a clean rag slightly oiled. Repeat the wiping every day, and polish as often as necessary.

Marble Polish.

B. L. K.—Mr. W. C. Durkee (Boston) gives the following formula for a marble dressing or polish:

Pure beeswax	10 parts.
Japan gold size	2 parts.
Spirits of turpentine	88 parts.

The mixture is of creamy consistence, and should be applied in small quantities, with the aid of a piece of white flannel. If it is desired for use upon white marble, white wax may be substituted. The same preparation can be used to advantage on woodwork. The Japan size prevents the stickiness which exists when wax alone is used.

Foul-smelling Substances.

W. R. M. wants the name and properties of "the most foul-smelling" chemical.

Carbon bisulphide and hydrogen sulphide solution are notoriously offensive. The valerianates, too, have a bad odor. The properties of these substances can be found in the literature.

GENERAL ESSAYS

A LITTLE BRIEF AUTHORITY.

BY HARRY B. MASON.

The gentle and modest William Dean Howells touches humorously in one of his novels—I think it must be "Their Wedding Journey"—on the awe begotten in him by the lordly importance of the ticket-seller in the railroad depot. Other observers, too, have called attention to the kingly air of condescension with which the man in the theatrical box office reluctantly consents, even at a good price, to furnish you tickets of admission to his Palace of Pleasure.

Novelists, essayists, humorists, and students of human nature in general should now be reminded that a third type of individual has risen to take his place, thanks to the automobile age, in the same group. This is the Traffic Policeman—the specimen of complete and unqualified Autocracy who stands at the street intersections of our great cities, and by a mere crooking of the finger establishes the law for Kings and Peasants

alike. Of this Overlord it may be said that the world hangs upon his slightest nod, and woe unto the man who ignores or anticipates his decisions!

The Traffic Officer is an interesting study, and a philosopher might develop a readable treatise on the phases of human nature which he typifies. I fancy that to snatch a man out of the ordinary circles of life, and, without warning and preparation, suddenly invest with all the power and dignity of a great office of this kind, is to subject him to a remarkable test of character. Few can stand so dizzy a climb without losing their heads, and it seems to me that some graduated system of ascension should be worked out so that the Heights of Authority might not be reached with such startling suddenness.

All of us are hungering for power of some sort—social, political, financial, or intellectual. It is meat and drink for us. To gain it we are willing to undergo all sorts of privations, meet all manner of rebuffs, and even found a new political party if the goal can be reached in no other way. This being, then, a universal trait of human nature, is it cause for wonder that the Traffic Policeman swells up over his sudden achievement of a little brief authority and begins at once to play the autocrat?

He represents power more completely than almost any other individual in the community. The high-handed husband may be flouted; the dictatorial employer may be dared; the trust may be ignored; the judge may be overruled; but you can do none of these things to the Traffic Officer. He demands unconditional and immediate surrender—and there is no redress or appeal. For the time being he represents the law in his own person—and martial law at that.

If you question his rulings, or fail to understand them, or happen not to see his kingly wave of the hand, what do you get? Abuse—voluble, vigorous, violent abuse, embellished with all the ornamentation of a policeman's vocabulary. "What y' stoppin' there for? Don't you know any better'n that? How much time y' want for crossing this street anyway? Hurry up now—git yourself out o' here quick!" And there is more of the same Chesterfieldian language following you as you go on up the street in your machine.

What redress, we may ask, has one got against Verbal Power of this sort? Verbal Power, indeed, is the most complete sort of power in the world. A gentleman cannot compete with a policeman in a Contest of Vulgarity. He is sure to be worsted. He is unskilled. The meanest things he could say would fall short of the mark, and the Man in Blue Cloth and Brass Buttons would come out an easy winner at every bout.

It's no use—we are mastered. This may be a democratic country, but every little while some dictator arises, lords it over us with authority more or less brief—and we bend the knee. The Traffic Officer has seen his opportunity. If the Dean of American Letters was awed into insignificance by the superior attitude of the railroad ticket seller, what chance, think you, do the rest of us have to hold our own against the far greater importance of the Traffic Policeman? None whatever. Submission is the only thing left to us—and we may as well do it gracefully.

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THE MONTH'S HISTORY

A LITTLE POLITICS.

As we are scanning the field this month to detect developments of interest in current pharmaceutical history, it seems to us that almost everything is overshadowed by the great national interest felt among all classes and in all callings in the forthcoming State and national elections. This year is certainly an exceptional one and it promises to play a large part in the political annals of the country. The BULLETIN OF PHARMACY, however, is not in the slightest degree a political organ, and we do not propose to express any political sympathies. Furthermore, the election will be over with in all probability before at least some of our readers receive this issue of the BULLETIN, and predictions might sound foolish in the face of realized facts.

At this writing it looks as though Governor Wilson would be elected, chiefly because the Republican party is split in twain by the existence of two tickets and two candidates. It is generally believed, however, that the attempt upon the life of Colonel Roosevelt has so altered the possibilities as to make any sort of prediction somewhat hazardous. In any event, whatever the results may be, we have pleasure this month in presenting the portraits of another group of druggists who are up for public office in different parts of the country. Several of them have been nominated for their State legislatures, and two of them are candidates on the Progressive ticket. We are very glad to see druggists interesting themselves in politics. Particularly in the State legislatures, they are in excellent position to render valuable services to their calling.

* * *

DRUGGISTS IN OFFICE.

Theodore Campbell, for instance, whose portrait we present this month, and who is up for reelection to the Pennsylvania legislature on the Republican ticket, is a member of the Committee on Legislation of the Pennsylvania Pharmaceutical Association, and in his dual capacity he has looked out well for the interests of the trade. Samuel C. Henry of Philadelphia, the new member of the Executive Committee of the N. A. R. D., is also a nominee for the State legislature this year, but we have been unsuccessful in getting his portrait for reproduction. In another legislative district in Pennsylvania we find that two druggists are opposed to one another—Jacob W. Smith on the Democratic ticket and Dr. T. E. Davis on the Progressive ticket. Dr. Davis's portrait we are showing this month, but we have been unable to secure that of Mr. Smith.

One portrait in our group this month is of particular interest—that of Jerry T. Logie. Mr. Logie is only 26 years old, and he is the youngest man ever elected as an alderman in

the city of Grand Rapids, Michigan. In a recent letter to us he expresses his conviction that the druggists of this and other States should make greater effort in the future than they have in the past to have representatives of their own in public office to safeguard their interests. This has been the N. A. R. D. gospel for years, and we are heartily in sympathy with it.

* * *

**MR. PLAUT
ELECTED
PRESIDENT.**

The National Wholesale Druggists' Association held its annual meeting in Milwaukee last month, and it was a very successful gathering. The attendance was somewhat less than usual, but a good deal of very effective work was accomplished. The president



Albert Plaut.

elected to conduct the organization during the coming year was Albert Plaut, and the choice was one of great fitness. Mr. Plaut is well known as head of the house of Lehn & Fink in New York City. He has always been one of the leading figures in the N. W. D. A., and among other things has occupied the strategic position of chairman of the Board of Control. Some years ago, too, he was chairman of the Committee on Adulterations, and the report read by him on that occasion was quoted all over the country and even abroad. He is an authority on the drug market, is a man of unusual ability, has wide interests, concerns himself with civic and educational affairs, and will reflect dignity and character upon the office of president.

**A GRADUATION
LAW IN
NORTH DAKOTA!**

We discussed the graduation prerequisite question at some length in the BULLETIN last month, and gave a history of recent votes taken in several States to determine what the general sentiment was. We now find, as an interesting supplement to what we then said, that a graduation prerequisite law has been enacted in North Dakota. Our authority for making this statement is the *Northwestern Druggist*, in the October issue of which Prof. F. J. Wulling quotes the provisions of the act and comments upon them. This makes four States having graduate prerequisite laws—New York, Pennsylvania, Rhode Island and North Dakota. In addition to this the Board of Pharmacy of the State of Washington, as we reported last month, has established the graduation prerequisite on its own initiative.

The North Dakota law provides that after January 1, 1913, an applicant for registration before the State Board of Pharmacy must, among other things, have completed at least one year of work in an approved school or college of pharmacy. After January 1, 1915, two years later, he must have been graduated from an approved school, and must have received a diploma therefrom. As to what constitutes an "approved" school or college, the Board of Pharmacy is given the power to separate the sheep from the goats, although it is definitely stated in the law that no school shall be recognized unless it has a competent faculty of instructors, a two years' course of not less than 600 hours given to lectures and recitals and 200 hours given to laboratory work, and unless each school year consists of not less than thirty-two weeks and five days of every week.

* * *

**THE CLERKS ON
THE PREREQUISITE
QUESTION.**

The foregoing reference to the new graduation prerequisite law in North Dakota reminds us that there was an exceedingly hot debate over the prerequisite question at the recent convention of the California Drug Clerks' Association. Notwithstanding the fact that a large majority of the clerks in attendance upon the meeting were themselves non-graduates, and that there was a strong sentiment against making the restrictions too severe, a resolution was finally adopted unanimously in favor of a modified graduation pre-

requisite. This resolution was, however, in the nature of a compromise. When the vote was first taken, it was against the prerequisite idea. Subsequently, when the sentiment became so strong as to compel a reopening of the question, the advocates of prerequisite legislation gained additional strength and overturned the previous vote.

In its final action the association recommended that a law be introduced into the next session of the State legislature providing that after July 1, 1914, all candidates applying for examination before the State Board shall have completed one full term in a college of pharmacy whose entrance requirements cover not less than two years of high school work or its equivalent; and that after July 1, 1915, they shall have completed two full terms in such a college.

It will be seen by reading between the lines of these requirements that actual graduation is not provided for or made mandatory. This was in the nature of a compromise; and it was asserted, moreover, that once a law were enacted and enforced, the requirements might be stiffened if the conditions then warranted such a step, and if prerequisite legislation were found to be successful.

* * *

ACHIEVEMENTS OF THE CALI- FORNIA CLERKS.

The California Drug Clerks' Association, indeed, is a pretty live organization. Until recently, the membership has apparently been limited to San Francisco and the surrounding cities. Energetic efforts have lately been made to create what would really be a strong State organization, and the first annual convention, held in September, was the result. President J. S. Callaghan, in his address, declared that the California Drug Clerks' Association had among other things achieved the following list of triumphs during its existence:

First: The ten-hour law, which provides a drug clerk shall not work more than an average of ten hours a day, or sixty hours a week of six consecutive calendar days.

Second: The minimum scale of wage. The Association decided that an increase of salary was a necessity, and with the coöperation of the proprietors a schedule was adopted of the minimum wage of \$100 for licentiate and \$75 for assistant.

Third: The closing of drug stores Sunday afternoon from 1 to 5, initiated by our Association, and extending, with the exception of a few towns, all over

the State, and which all drug clerks should use their utmost endeavor to maintain.

Fourth: The employment bureau, which has been the means of securing positions for many clerks out of employment.

Fifth: The sick and death benefit. We are the first organization of drug clerks in the United States to make provision for the sick, and provide funeral expenses.

Sixth: Representation on the State Board of Pharmacy, numbering three of our brothers, all of whom have taken an active part in the life of the Board in the past ten years.

Seventh: The *Drug Clerk's Journal*, the first issue of which appeared in October, 1911, edited and published by the Association in the interest and welfare of the drug clerks.

* * *

THE PROPRIETARY MEDICINE INDUSTRY.

In the October issue of the *Pharmaceutical Era* there is a very interesting article on "The Proprietary Medicine Industry," by Frank J. Cheney of Toledo, president of the Proprietary Association of America. Some facts are therein contained which we believe will prove rather astonishing to our readers, as they did to us. In the first place, the total production of proprietary medicines in 1911 was \$160,000,000, whereas in 1909 it was \$142,000,000, and in 1904 \$117,000,000. Thus, as Mr. Cheney points out, the patent medicine industry has undergone a remarkable development during the very years when it has been hammered so severely by the popular magazines and by attempts to secure unfriendly legislation.

Mr. Cheney remarks, however, that never has there been a time, during his 40 years of connection with the industry, when it has not been made the subject of more or less systematic and continued opposition. That the business can thrive under constant pummeling seems to him strong evidence that it fills a real need, fills it well, and is bound to survive and grow. At the present time 53 per cent of the gross sales of jobbers are of proprietary medicines. But even this does not tell the whole story, for it does not include any of the proprietaries sold direct by the manufacturer to the retailer, or those made by the retailers themselves, or those made and marketed by coöperative concerns. Then, too, the itinerant venders do a business of large volume in ready-made medicines, so that altogether the figures are stupendous.

Mr. Cheney concludes, and he challenges any one to refute his statements successfully,

"that more patent medicines are used to-day than were previously used in the history of the world, that the business is larger this year than it was last, and that it will continue to grow. The per capita consumption is increasing, the population is increasing, and it follows that the proprietary medicine business will likewise continue to increase." He points out in conclusion that the retailer who makes his own domestic remedies is really as much of a manufacturer as are the members of the Proprietary Association themselves, and that any legislation hostile to the interests of the industry affects him no less than it does them.

Mr. Cheney makes no attempt in his article to defend those manufacturers and those proprietaries which are properly subjects of censure. He admits that there are always abuses to be corrected. But he insists that the Proprietary Association of America has never put itself in opposition to needful legislation, that it did not oppose the food and drugs act, that it has not opposed the enforcement of this act, and that it has been in sympathy with the enactment and enforcement of the various State narcotic laws.

* * *

**COCA-COLA IN-
JUNCTION AGAINST
THE A. D. S.**

The Coca-Cola Co. has won first blood in its suit against the American Druggists' Syndicate. Judge Lacombe, of the United States District Court of the Southern District of New York, has issued a temporary injunction confirming the trade-mark rights in the name "Coca-Cola," and restraining the A. D. S. and its members from infringing these rights through the use of the name "Extract of Coca and Kola," or any other name which "is no substantial departure from the term 'Coca-Cola.'" The operation of this injunction, however, has been stayed by the court for sixty days in order to allow sufficient time for the A. D. S. to withdraw its product and its advertisements. In the meantime, of course, the Coca-Cola people will endeavor to have the injunction made permanent.

The contention of the plaintiff was that the American Druggists' Syndicate had attempted to substitute its product for Coca-Cola, and in evidence there was exhibited a mass of advertising literature and several catalogues which had been prepared and circulated by

the A. D. S. The further claim was made that the use of the name "Extract of Coca and Kola" constituted an infringement of trade-mark rights. The reply of the Syndicate was that substitution had in fact not been practiced, and that in any event the name Coca-Cola was a descriptive one and was not entitled to trade-mark protection. Judge Lacombe held, however, that the company's trade-mark rights had been established last July in the suit against the Nashville Syrup Co., and he declared that the use of the term "Extract of Coca and Kola," or any similar term, whether or not the word Kola was spelled with a K or a C, was an insufficient departure to avoid the imputation of unfair competition and the interference with trade-mark privileges.

* * *

**A REMARKABLE
CHARACTER.**

There passed away a few weeks ago in Boston a man who was not very well known to the druggists of the country, but who was nevertheless a remarkable character. We refer to Charles P. Jaynes. Mr. Jaynes was entirely a self-made man. Starting life as a boy in a drug store, he subsequently traveled for twenty years as a drug salesman, and finally secured enough capital to start a small drug store for himself in Boston. Following out several entirely original conceptions, his business began to jump forward from the start, and he ultimately developed five large stores located at strategic points in the down-town districts of Boston. They all became remarkably successful, and finally, when Mr. Jaynes had reached the age of 55 or 60 years, and was willing to retire from business, he accepted a most flattering offer for the purchase of his business from the William B. Riker & Sons Co. of New York City.

After that he devoted himself to the pleasures of leisure, to various charitable and philanthropic activities, and to the investment of his wealth. He suddenly died late in September from heart failure at the age of 67. His estate is now found to be valued at \$530,000, and among the bequests provided for in his will have been those made to certain hospitals, the Boston Y. M. C. A., the Salvation Army, a home for aged couples, and the like.

During the establishment and the growth of his stores, Mr. Jaynes, it must be confessed, practiced certain cut-rate and other aggressive methods which made him *persona non grata* to the druggists of Boston. Aside from this, too, he had many ideas which were extremely unconventional in character. Appealing primarily, for instance, to an enormous transient trade, he discouraged any custom in prescriptions during the rush hours of the day when commuters were coming from or going to their trains. It is a novelty for a pharmacist to turn his back on the really pharmaceutical portion of his business! And yet he developed excellent prescription departments in all his stores, and for several years employed a professor of pharmacy to analyze his purchased stock and to give assurances of high quality.

He was a pioneer in many respects, and a character of great originality. He rewarded brains liberally on the one hand, and on the other he had nothing but the most rabid impatience for incapacity. He trained up a fine force of assistants, managers, and clerks, and to the very last he kept his fingers on the pulse of his business. He made a brilliant success of all of his endeavors.

* * *

**REGARDING
CONTRABAND
SYNTHETICS.**

The prosecution of several hundred druggists by Herman A. Metz & Co., now known as the Farbwerke-Hoechst Company, for the sale of contraband synthetics, has attracted a great deal of interest and some measure of indignation. In New York City, where most of the arrests have been made, the pharmaceutical societies have been inclined to look upon the whole campaign as one of persecution instead of prosecution. We now find in the October issue of the *Practical Druggist*, however, a letter from Mr. Metz himself, which is in effect an answer to some of the allegations of unfairness made against his house.

He says, for instance, that in the case of synthetics on which the patent has expired, there would be no objection if druggists

bought a product under the chemical name, and answering to the standard of quality, but instead of this they purchase supplies from peddlers "who have their offices in their hats, who give no bills, who simply send the goods by mail against cash, or hand them over the counter, without any guarantee as to the quality, and the only way to stop all of this is to make examples of those druggists who persist in the illegal practice." These peddled synthetics, Mr. Metz insists, are "adulterated in many ways," and the circulars issued by at least one dealer call attention to the fact that he can deliver "goods of any standard at any price, but will not guarantee the quality!"

With particular reference to pyramidon, for instance, Mr. Metz says that he is on the track of an American dealer who "obtains an article made in Switzerland, brings it over in bulk, has boxes made in imitation of our package and a label in exact imitation, bearing not only the trade-mark name pyramidon, but the name of the manufacturer and the name of my firm, with the pure food and drug guarantee besides!" Some of these packages have been examined and found to be different in appearance and in therapeutic value. Others are under weight. "Every kind of a swindle is being perpetrated," declares Mr. Metz, "and all under the label of the manufacturers of the real article and under the label of my firm as sellers."

* * *

**DELAY
THE N. F.?**

There seems to be a pronounced movement now to delay the publication of the National Formulary until after the new edition of the U. S. P. has made its appearance. The argument is that, on the one hand, some of the proposed N. F. preparations may appear in the U. S. P., and that on the other hand most of the deletions of the U. S. P. are of sufficient value to include in the N. F. In some respects, however, the delay will be unfortunate, for we understand that the N. F. is now practically ready for publication, whereas the U. S. P. will probably not appear for a couple of years or more.



EDITORIAL

THE GROWING DEMAND FOR MORE SIDE-LINES.

There is an exceedingly interesting article in the August 22 issue of *Printers' Ink* entitled "Why Drug Stores Like New Lines." The author, Laurence Griswold, is presumably an advertising man. At any rate, writing from the standpoint of the manufacturer, he points out the incontestable fact that nowadays, when a house wants to market a new specialty of any kind whatsoever, whether having anything to do with the drug business or not, it considers the druggist as a distributor quite as much as it does other classes of merchants. Some manufacturers, indeed, have found that it pays them to distribute their entire output through the drug trade, even though the article is something like insoles, which one would naturally think might more appropriately be handled by shoe dealers.

The author of the paper in question goes on to say that the demand for new side-lines in the drug business is becoming increasingly urgent. Why? Well, several reasons are given. In the first place it is assumed that the actual business in drugs is not as good as it used to be. Says Mr. Griswold on this point: "The war for sanitation, pure drug legislation, patent-medicine crusades, the abandonment of counter prescribing, and a great falling off in the number of liquid prescriptions compounded, are a few of the causes of the losses mentioned. Of course, the causes in each case were public benefits, but they cut deeply into the revenue of the old-fashioned drug store."

Arguing along the same line, the author goes on to remark: "People have learned to use medicine as a preventive. Sanitary laws have stiffened greatly in the last twenty years. More teeth are filled and fewer are pulled. Scores of ailments were traceable to bad teeth. With more attention being given to teeth, prescriptions have decreased and likewise the attendant profits. These are some of the things which have restricted the field from which the store limited to drugs can derive a revenue."

Another reason given by Mr. Griswold for the assumed dwindling in the drug sales of any one pharmacist is the alleged increase in the

number of drug stores. He believes that the increase has been greater than the decrease by fully 20 per cent, and he apparently believes that New York City, for instance, has no possible use for 5000 retail drug stores. The inevitable result, according to his reasoning, is that the druggist has to reach out more and more for side-lines of one character and another. First it was cigars, then stationery, then confectionery and soda water.

Now, however, the movement has grown until the modern drug store has become in reality a department store. Mr. Griswold has been doing a little investigating, and he finds that live drug stores are selling a bewildering variety of things which pay them a good profit. During one of the first hot days of this season a New York druggist sold over 200 pairs of cork insoles following the installation of a window display in which this product dominated. A Brooklyn druggist has built up a nice sale on a patented device for watering flowers. Still another druggist, doing business in a suburban town, declared that shoes are a natural offshoot of rubber goods. "First came the adaptation of rubber gloves for dish-washing," he said, "then a rubber cap was stocked for the benefit of those who didn't care to get their hair wet every time they took a shower. Some woman wore one of the rubber hats down at the beach, and before you know it we couldn't supply the demand for rubber hats. A manufacturer of bathing shoes noticed the popularity of rubber hats. He probably figured that women might be induced to buy beach shoes while getting fixed up with a rubber hat. So the druggists were asked to add the line. They sell well, and there is a good profit in them."

By a similar process, "water wings," a bladder-like device for keeping a would-be swimmer's head afloat, were added to this particular store's stock. A manufacturer secured a patent on a "hat protector." This is a rubber-like covering which can be slipped over an expensive hat and will shield the headgear perfectly from rain. "That sells for ten cents," said the suburban druggist. "It may save a woman five or twenty dollars, and it is a good seller."

Other interesting side-lines mentioned by Mr. Griswold are olive oil for the table, bird seed, china cement, bath cabinets, razor strops, coffee, tea, watches, thermometers, artificial

flowers, whisk brooms, and a patented machine for washing dishes!

So much, then, for Mr. Griswold, and his views and observations. Whatever may be thought about this layman's somewhat liberal ideas regarding lines which may be carried by the druggist, it cannot be doubted that he is touching pretty closely on conditions as they actually exist to-day. Realizing the modern tendency long ago, the BULLETIN OF PHARMACY finally began during the present year a series of articles under the general title of "My Best Paying Side-line." This series was begun in the March issue, and so far the different side-lines described have been as follows: Hosiery, kodaks and photographic supplies, razors and shaving supplies, automobile supplies, optical goods, phonographs, souvenir post-cards, and electrical novelties. Several other papers, not yet published in the BULLETIN, will take up seeds, trusses, optical supplies, and even life and fire insurance. The article this month is devoted to jewelry, and Mr. Maffitt has shown most interestingly how he has made a success of the line.

Of course there are those who resent the introduction of such side-lines in the pharmacy, and who argue with Messrs. Hynson, Seltzer, Raubenheimer, and others that drug stores ought to contain nothing but drugs. But the desire to make a living, with a little something more in the way of comfort and a protection from future want, is as deep as human nature itself. It is bound to express itself. Meanwhile, however, by way of showing how the increase of side-lines in the drug store strikes the humorous cartoonists and the comic weeklies, we are reproducing elsewhere in this issue of the BULLETIN a drawing illustrating this subject from a facetious point of view.

REGARDING THE USE OF TRADING COUPONS.

One of the most interesting talks heard at the Milwaukee meeting of the N. A. R. D. in August was delivered by I. P. Lipson of Chicago, counsel for the National Anti-Coupon Association. The purpose of Mr. Lipson's address was to interest the druggists in an organized attempt to tax out of existence the iniquitous and ubiquitous coupon used nowadays as the old trading stamp was formerly employed.

Mr. Lipson explained that the National Anti-Coupon Association was an outgrowth of the National Leaf Tobacco Association, and was composed largely of independent retail dealers who must meet the competition of the United Cigar Stores Company. He urged the coöperation and support of retail druggists in the fight against the coupon on the ground that druggists themselves may some day have to compete with a chain of pharmacies which will be affiliated in some way with the United Cigar Stores Company, and which will employ a coupon interchangeable with those given out by the so-called tobacco trust. While we cannot recall Mr. Lipson's exact language, he said substantially:

We have been alive to the power of the United Cigar Stores Company. When one of these stores moves into the vicinity of, say, four independent cigar stores, the independent dealers know at once that within a year or so two of them will be put out of business by the powerful competition of the newcomer. It is only a question of what two are going to be the corpses and what two the undertakers. There is a mortality of 50 per cent among retail cigar stores forced to meet the competition of the so-called trust. We have investigated the causes of the success of the United Cigar Stores Company and have found that their prosperity is due, not to superior merit in their goods, nor to the attractive appearance of their stores, but to the use of the redeemable coupon. It is the coupon which gives them their hold on the public. The independent dealer is in closer contact with his trade than is the manager of the United Cigar Stores Company. The independent dealer, too, sells better goods. But the coupon is the one element, the only place where the United Cigar Stores have the advantage.

Mr. Lipson pointed out that it was impossible to offset the influence of the coupon by handing out trading stamps. The coupon used by the United Cigar Stores Company is their own peculiar property and hence destroys competition where trading stamps encourage it. Trading stamps are sold by a third party and anybody can buy them, but not so with the coupons of the United Cigar Stores Company.

At first the independent dealers hoped to legislate the coupon out of existence, but President Taft said that would be unconstitutional. It is legal, however, declared Mr. Lipson, to tax the coupon and thus indirectly prevent its use. If a tax were placed on the coupon for one-half its face value, it would cost the United Cigar Stores Company three times as much as it does now to use coupons, and the clerks would furthermore labor under

the necessity of placing a stamp on every coupon that was handed out.

Mr. Lipson appealed to the N. A. R. D. for its coöperation and financial support in this effort on the part of the Anti-Coupon Association to tax the coupon out of existence. He pointed out that it would be worth a dollar or two to each member of the Association to prevent monopolies from getting the same hold on druggists that they already have on tobacconists. He predicted, as we have already said, that a system of chain stores in the retail drug business might some day use the coupon system with the same hardship to retail pharmacists that is now imposed upon the independent cigar dealer.

The N. A. R. D., however, could not see its way clear to affiliating with the National Anti-Coupon Association, or giving it any financial assistance. It passed a resolution offering moral support, but went no further.

AN OPPORTUNITY WAITING TO BE EMBRACED.

This is the day of the popular magazine. It abounds everywhere. Millions of people read it. It is found in every home, from the poorest to the richest. Foreigners who visit this country tell us that in no other land are there so many magazines and periodicals, gotten up with so many illustrations and with such attractiveness generally, and read so universally by the people. The magazine in America is a force to be reckoned with.

Now one thing the magazines are doing is to create a steady and enormous demand for a large number of popular articles. The advertisements of these articles are being carried weekly and monthly into countless homes throughout the United States. It has been stated on excellent authority that no less than eighty millions of dollars are spent annually in the advertising of specialties of all kinds in the popular weeklies and monthlies! Where does the demand, so created, seek satisfaction—where do consumers go who want to get some of these nationally advertised articles? Why, they go to the nearest store. If the article advertised is a toilet product, for instance, they go to the drug store. If it is a food specialty, they go to the grocer. If it is something to wear, they hasten to the emporium of the modern department store.

The retailers, then, in all of these various lines, are neglecting a beautiful opportunity if they do not take advantage of this situation. Here is a demand steadily being created for a great variety of articles of one kind and another. Does the retailer make the most of the chance? Does the druggist, for instance, endeavor to bring this trade in his direction? Does he carry nationally advertised articles? Does he let the people in his vicinity know that he is in position to supply their wants? Does he let the live advertiser help him increase his volume of sales?

Unless the druggist can say Yes in most vigorous fashion to all of these questions, he is sleeping in the presence of a valuable opportunity. It has been said that "national advertising is the greatest single source of local profits ever devised." Does the retailer realize it, and does he seize upon the profits made ready for his hand? Unfortunately many national advertisers have found that retail distributors have not coöperated with them as they should, and they have been compelled to go out of their way to get the dealers interested. Some of the popular magazines have themselves endeavored to fill the breach by seeking the assistance of retailers. *Good Housekeeping Magazine*, for instance, has for several years been "re-advertising" to retailers generally the products exploited among its pages, has sought to get them to supply the demand created, and has even gone so far as to furnish them free with cuts and advertising "copy" for their circulars and other ads. Another step has now been taken by the *Good Housekeeping* people in the publication of a quarterly to be known as "Good Storekeeping."

"Good Storekeeping" will have for its main purpose the idea of securing the coöperation of retailers generally in supplying the demand created for nationally advertised products—and it will also seek to enlarge this demand. The paper, too, will contain a sort of digest of the most useful sales articles in the various trade papers. In a sense "Good Storekeeping" will therefore be to the trade journals of the country what the *Literary Digest* is to the newspapers. The idea is certainly an excellent one, and it deserves general support on the part of retail distributors in all lines of trade. "Good Storekeeping" is published at 381 Fourth Avenue, New York City, and our

readers would do well to ask to be put on the mailing list.

An article from the first issue of "Good Storekeeping" we are reproducing elsewhere in this number of the BULLETIN. It will be found among our "Selections." There is no doubt at all that the retailer who is prepared to supply the demand created for nationally advertised goods is following lines of least resistance. The work is already cut out for him—all he has to do is to fall in line and reap the profit! Somebody is going to get the business. Will he take it, or will he let it go to the other fellow in his town?

PROFITS AND EARNINGS

SIX MONTHS OF A NEW BUSINESS.

The owner of this business has had the place only six months. He wants to know how he is doing. The business altogether is not ten months old. The present proprietor bought the store from his predecessor.

Stock and fixtures Feb. 28, 1912.....	\$1941.98
Stock and fixtures Aug. 28, 1912.....	2200.73
Cash sales, including accounts received.....	4198.40
Credit sales	761.19
Purchases	2632.53
Expenses	543.04
Proprietor's salary	504.70
Paid on purchases.....	1914.71
Paid on the business and on notes.....	862.75
Notes owing for business, with interest.....	1164.55
Accounts owing on purchases.....	530.92
Cash in bank.....	472.56
Outstanding accounts	254.00

This statement is rather peculiar. Many of the items in it would be useful in setting forth assets and liabilities, but they play no part in a statement designed for the purpose of discovering what the profits are. Ignoring, then, most of the figures and digging right down into the heart of the matter, let us find out what this man made on his business during the first six months.

His sales were \$4198.40 plus \$761.19, making a total of \$4959.59. The purchases, on the other hand, were \$2632.53, but a comparison of the inventory figures shows that goods to the amount of \$258.75 went into the permanent stock and were not actually sold again. Subtracting this amount, we find that

the cost of the goods sold during the six months was \$2373.78. Deducting these figures from the sales of \$4959.59, we have gross profits left of \$2585.81—or 52 per cent! In the meantime the expenses were \$543.04, plus the proprietor's salary of \$504.70, making a total of \$1047.74. Subtracting this expense charge from the gross profits of \$2585.81, we find net profits of \$1538.07—or 31 per cent!

Now it goes without saying that a gross profit of 52 per cent, and a net profit of 31 per cent, both calculated on sales, are certainly astounding. The average gross profit is 35 or 40 per cent, and the average net profit ranges from 10 to 14 or 15 per cent. Of course we are talking about profits based on the selling and not on the cost price. Our friend must sell goods at a remarkable advance over the cost, or else he has made a mistake somewhere in the presentation of his figures. There is an opportunity for error, for instance, in the item of "cash sales, including accounts received." Some of these "accounts received" may have been contracted during the previous ownership of the store, and were therefore not properly a part of the six months' business recorded in the statement. The only way to avoid errors of this kind is to compare accounts receivable at the beginning of the year with those at the close, and then to give the year's sales credit only for any surplus, and correspondingly to deduct any deficiency.

Taking our correspondent's statement at his own valuation, however, we find that his net profits were \$1538.07. He had in the meantime paid himself a salary of \$504.70, which presumably represented all of his living expenses. The \$1538.07 of net profits should therefore have actually accumulated in cash, except for the \$258.75 which went into the increase in inventory. Checking up the figures in another way, we have totaled all of the cash receipts, and compared them with the cash disbursements. The disbursements are something like \$100 in excess of the receipts. This disparity leads us to believe that our correspondent's figures are at least inaccurate in some details.

The business is small. Evidently the proprietor does all the work himself, without the assistance even of a boy, and he is thus enabled to make a low expense item of 21 per

cent. Sales of \$5000 for six months mean \$10,000 for a year, and a \$10,000 business without a boy is going some! We should naturally assume that at least one assistant would be required, and if one were employed it would increase the expense and cut down the showing somewhat. Even with this concession, however, the business is certainly a remarkably profitable one. Entirely apart from what the expenses may be, gross profits of 52 per cent are not to be picked off every bush! Fifty-two per cent, based on sales, means 102 per cent based on cost, so that we are asked to believe that everything was sold at a little more than twice what was paid for it!

Where is this Elysium situated?

H. B. M.

IS THIS STORE A GOOD BUY?

A BULLETIN correspondent submits the statement of a pharmacy which he contemplates buying. He wants to know the net income.

Jan. 1, 1911: Stock (including fixtures, worth \$2000).....	\$12,600
Jan. 1, 1912: Stock (including fixtures).....	12,400
Purchases for the year.....	11,000
Expenses	5,650
Cash sales	18,500
Credit notes	2,200
Discounts	325
Accounts receivable at end of year.....	600

The expenses include taxes and interest on the money invested.

We wonder at the outset whether the expenses include the manager's or proprietor's salary. It belongs there.

It is inadvisable to charge up to expense the interest on the investment. Perhaps that explains why the expenses are so high. Dividing \$5650 by the sales, \$18,500, we find the percentage of expense to be 30.54. The expense ought not to be over 25 per cent for a business of this size. Consider taxes an expense, but do not charge up against the profit the interest on the investment. The net returns from the business are themselves the equivalent of interest on the capital tied up in stock. Figuring money at six per cent, the interest on \$12,400 is \$744, which swells the total expenses appreciably. Subtracting the item of \$744 from the expenses to rectify the error of putting it there in the first place, we

find the expense is reduced properly to \$4906. Dividing \$4906 by the sales \$18,500, we now find the percentage of expense is 26.5, which looks more reasonable.

Proceeding next to estimate the net profit for the year, we notice first that the stock showed a shrinkage of \$200. The owner disbursed \$11,000 for goods and \$4906 for expenses, a total of \$15,906. He took in \$18,500. Subtracting the disbursements from the receipts, \$18,500 minus \$15,906 equals \$2594, the net profit. Subtracting now \$200, the shrinkage of stock, from \$2594, and we find the net profit to be \$2394. Dividing \$2394 by the sales, we find the percentage of net profit to be 12.9. If you insist on including the interest on the money invested in the expenses, it will decrease the net profit to \$1650, or 8.9 per cent. But as we have already pointed out, that would be inaccurate and contrary to the best practice.

We should say that the net earnings of this store are very satisfactory provided that the expenses include the manager's or proprietor's salary. Of course, if his salary still remains to be paid out of the earnings thus calculated as net, why, then the story changes! If you have to subtract a salary of \$1200 from \$2394, which is supposedly the net earning, the showing of the place would suffer severely.

JNO. H.

THE HALL OF FAME

PREPARING FOR THE NASHVILLE MEETING.

When the A. Ph. A. decided to go to Nashville in 1913, it brought great joy to the heart of J. O. Burge. Mr. Burge has been endeavoring at various times for fifteen years to bring the association to his town. He began at the Montreal meeting in 1896. Last year he was again active at the Boston convention, and this year he went to Denver with blood in his eye. The members finally capitulated.

It was only right and proper under the circumstances, after Nashville had been selected for 1913, that Mr. Burge should be elected local secretary. In this capacity he will have supervision over all convention arrangements. Already Mr. Burge has called a special meeting of the local branch of the A. Ph. A. to take pre-

liminary steps. He is president of the branch, while the vice-president of it is E. A. Ruddiman, and the secretary W. R. White. All three men are more or less regular attendants at the annual conventions. Nashville is cen-



J. O. BURGE.

trally located, easily accessible from all points, and the prospects for a large meeting are excellent. The Nashville people, too, are determined to roll up a lot of new members for the Association.

DEATH OF FRANK A. FAXON.

The sudden death of Frank A. Faxon, of the Faxon & Gallagher Drug Co., Kansas City,



FRANK A. FAXON.

Mo., removes one of the ablest leaders in the jobbing trade of the country. For a long

period Mr. Faxon had been one of the coterie of six or eight men who were really the life and spirit of the National Wholesale Druggists' Association, and he served as its president back in 1894. Conspicuous for his talent as an orator, he was often called upon to make speeches of one kind and another, and he was never in happier vein than when acting as toastmaster at a large banquet. In the commercial life of Kansas City Mr. Faxon was always prominent. At one time he was a member of the Board of Aldermen, and at his death was president of the Board of Education and at the head of the public library system. On several occasions he served as president of the Commercial Club of Kansas City, and it was indeed while walking from his office to this Club, in order to take part in the annual election of directors, that he was fatally stricken with apoplexy.

PROFESSOR LLOYD A PANAMA COMMISSIONER.

Governor Harmon of Ohio has recently appointed Professor John Uri Lloyd of Cincinnati a member of the Panama Exposition Commission of the State. The other two



JOHN URI LLOYD.

members of the Commission are Robert E. McCarty of Columbus and F. E. Meyers of Ashland. This signal tribute to the disinterested ability of Professor Lloyd will prove gratifying to all of his friends.



E. F. Leonard, Springfield, Mass., Progressive nominee for the State senate.



Dr. F. F. Jackson, Oakland, Cal., candidate for Commissioner of Public Safety.



Jerry T. Logie, Grand Rapids, Mich., elected member of the City Council, 9th ward.



Dr. J. D. Humphrey, Huntsville, Ala., recently elected City Commissioner after a hot contest.



Theodore Campbell, Philadelphia, Pa., Republican, renominated to succeed himself in the State legislature.



Edward H. Fahey, Philadelphia, Pa., Republican, renominated to succeed himself in the State legislature.



Francis D. Warner, New Carlisle, Ind., Republican nominee for State representative.



W. P. Porterfield, Fargo, North Dakota, Democratic nominee for State senate.



Dr. T. E. Davis, Summit Hill, Pa., Progressive nominee for the State legislature.

Nine More Druggists in Politics this Year.



The Bliss Drug Co. of Bliss, Idaho, has recently made some improvements in its store. The proprietor is J. H. Collins, who is presumably the gentleman at the left.



It is evident from this picture that G. E. Thrash, of Chunkey, Miss., the man at the left, does a thriving business. Look at the number of customers lined up!



"Scruggs for Drugs," is an advertising phrase used by R. H. Scruggs, Laurel, Miss. The store was apparently fitted up by Bangs, and is very neat.



Louis Zrubek, a Bohemian druggist of Cistern, Texas, writes us that in this view he is pouring from a bottle containing one of Parke, Davis & Co.'s fluidextracts.



W. J. Deems, Laud, Indiana, will soon complete 25 years of a varied experience in pharmacy. Mr. Deems himself is shown in our picture, and is the oldest druggist in point of service in Whitley county.



Walter Holberread, Litchfield, Illinois, has one of the most attractive and best-equipped stores in the State. It was recently fitted up by the St. Louis Carbonating and Manufacturing Co.

CATCHING THE CHRISTMAS TRADE.

The Arrangement of Holiday Goods—Decorations that Beautify the Store Interior—Three Trims which Made the Window a Center of Attraction—Several Advertising Ideas Appropriate to the Season.

**By J. EARL TAYLOR, Ph.G.,
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Christmas comes but once a year. For the help this is often enough, as the holidays mean a lot of work. Every one in the store must turn his attention to ways and means of securing the season's business. The clerk must give careful thought to the subject of gift goods and must make holiday suggestions in a way that will gladden the heart of his employer, and, incidentally, gain for himself a raise in salary.

Sometimes it is easy to formulate such

attention now to windows and interior decorations, arranging the tables on which holiday goods are to be displayed in the center of the store. This arrangement of goods on the tables expedites the work of waiting on the trade during the Christmas rush. Avoid everything that tends to impede the clerk, for time is a valuable asset at this season of the year.

Having set the tables in place, we next turn our attention to ways of decorating



Window Display Number 1.

plans, but again it becomes a burden, especially if the year has been a heavy one and the clerk's time has been occupied with other duties. The fact that the hours of the ordinary clerk are pretty well filled has led me to try and lay before him some plans that I have used with telling effect in my own store.

DECORATING THE TABLES FOR THE DISPLAY OF GOODS.

First, one must proceed to advertise. Let us assume that plans have been laid out for a suitable advertising campaign and we are ready to go ahead with it. One must give

them at a minimum cost to the employer. A clean, tasteful decoration, and one that is not expensive, can be made of regular ornamented crêpe paper. This can be purchased at 5 cents a roll of ten feet and gives a good effect. Cover the sides of the table with crêpe paper. Over the base of the table spread plain white wrapping paper, and over this a few napkins with Christmas designs on them. Some use cotton and Santa Claus snow, but I prefer to avoid this substance for the simple reason that it is inflammable. If a customer should come in smoking a pipe, he may set it on fire—a fact which I know from experi-

ence. So I say, try to avoid using anything which may result in a conflagration.

On the top of the table arrange a series of steps, large at the base and smaller toward the top, or take plate glass and cut out shelves and mount them on iron T's. If you use the T's, as I did last season, it will not be necessary to cover the shelves; plain, clean glass looks very well as it is. At each end of the table secure an upright post, extending up above the table about four feet. Stretch a

proper shape, paint the pieces white, and before they dry dust them over with Santa Claus snow or cover them with diamond dust. The best paint to use in this work is white alabastine.

On the ceiling suspend crêpe paper about three inches wide and give the strips a twist before securing the lower ends. Secure the top end to the center of the ceiling and attach the other ends to the shelving. This scheme gives a pyramidal effect which is



Window Display Number 2.

wire across the entire length of the table and secure it on top of the uprights. Decorations in crêpe bindings or autumn leaves are pretty. Arrange them in a canopy over the table. The wire may also be used to hang light articles on; also to hold price-cards and announcements.

The table may now be filled with such articles as one cares to select. It is preferable to set heavy, bulky goods on the main base and lighter articles on the shelves. Attach the right kind of price-cards and display them properly. With these precautions the table should draw attention and necessarily sell the goods.

INTERIOR DECORATIONS.

For interior decoration I stretched a wire on each side of the room full length. At intervals of about ten feet I stretched wire from side to side across the main wire. On these wires were hung autumn leaves and cardboard painted to represent snow and icicles.

To make icicles, cut cardboard into the

very pretty. Suspend Christmas bells and decorations at different points.

WINDOW DECORATIONS.

In considering the various articles which may be placed in the window, it may be remembered that magazines make a very appropriate present at Yule-tide. They are especially appropriate as gifts to friends outside of the family and should receive careful consideration. We arranged the magazine trim shown in the first illustration. That was our opening shot. At the same time we ran a newspaper ad. calling attention to the fitness of magazines as Christmas gifts. We also mentioned the fact that our window was devoted to a magazine display.

The trim itself was so plain that it calls for little description. In the center was a fireplace over which we arranged the covers of the *Ladies' Home Journal*. Flags were draped as shown in the illustration. On the floor appeared, conspicuously, a sign reading: "Subscriptions received here for any periodical at publishers' prices." Other things in our

window that impressed the passers-by with the fact that it was time to consider Christmas shopping were two display cards. The one in the center read: "In every American home clean, pure, wholesome literature is found. It generally includes the *Ladies' Home Journal*. \$1.50 a year—twenty-four issues." The sign on the right read: "A subscription to the *Ladies' Home Journal* makes an excellent Christmas gift. Twenty-four copies for \$1.50." Santa Claus, himself, was run by clockwork, thus lending motion to the trim. My advice is always to have something moving in the window whenever it is possible.

As a result of this trim we placed a num-

wreaths hung suspended at given intervals. At the background appeared latticework in white with holly wreaths and autumn leaves draped over it. Christmas seals, fancy box paper, cards, booklets, and calendar pads were the articles featured in this trim. At the extreme right, near the latticework, hung a large red Christmas bell. From time to time we set different articles in the window. It is hardly necessary to add that this trim was a winner.

The third trim was the main one. It carried out a plan that I had intended should be a winner, and it was. It featured our contest. I might say in explanation that last



Window Display Number 3.

ber of subscriptions, not only for the *Ladies' Home Journal*, but also for several other magazines.

THE OTHER TRIMS.

The main trims used at Christmas-time in our store were those shown in the accompanying illustrations, Nos. 2 and 3. The backgrounds that appear in these displays were used for several trims, the goods being changed as sales were made.

Trim No. 2 was made by placing a fireplace diagonally across one end of the window and covering the top with pure white paper. A border of Christmas crêpe paper about three inches wide extended around the top. The center of this background was ornamented with Christmas tags, seals, and similar articles, as shown in the illustration. Behind this was pure white puffing with holly

year, while in Chicago, I purchased an elegant jointed doll with a view to conducting a doll contest during the holidays. The trim itself may be arranged as follows:

Over the entire background secure a green ingrain paper. Next, take large sheets of white wrapping paper, and lay them on the floor on newspapers or anything else to keep them from getting soiled. Paste the papers together to make a length sufficient to cross the background. Then take black crayons and lay out designs of trees. Finally cut these out with a scissors. Proceed then to paste these tree images in position on the background. The effect may be seen in the illustration. The green background appearing through the cut-outs gives a somewhat realistic tree effect. Over the entire border-line run the three-inch decorated crêpe. Over the

side end decorate green below and white above, using the same border as that on the background. On the side space hang the holly wreaths. From the top of the trim suspend gold and silver tinsel, together with all kinds of bead work, Christmas garlands, and similar ornaments, as shown in the illustration.

You can readily surmise the effect of this window when four 60-watt tungsten lights are turned on to illuminate it. Both the near and far observers were attracted. It attracted

sets, jewel cases, and other things. Every two or three days the articles were changed, thus lending variety to the trim and showing our complete line of holiday goods. Cigars, perfumes, books, and stationery were not omitted. The large placard in the center of the background told the nature of the contest: "This \$6.00 doll given away on Saturday evening, December 24th. With every 50-cent purchase you may place your name on a card and drop it in the box. At nine o'clock Saturday evening, December 24th, the tenth card drawn from the box wins the doll, providing the owner is present."

THE RESULTS.

Aside from constantly talking over the contest with customers, we called attention to it in our newspaper space. It is needless to add that the contest was a success. The results were as follows: Our sales were almost doubled, while the cost of advertising and conducting the contest did not exceed \$15.00. I kept an exact record of our disbursements and receipts, but have misplaced it. The combination of window displays and printer's ink gave us the most successful holiday season we ever experienced. The advertisement shown in the accompanying etching was used, but, unfortunately, I am unable to find the ad. announcing the winner of the contest. Of course, we ran many locals in the paper.

The ad. shown in the etching was a beneficial one. The little paragraph at the end was true. When our goods were displayed and the prices shown, people realized that they were getting real bargains. I had made a deal in Chicago that saved us 25 to 33 1/3 per cent on every purchase, and I, in turn, gave the trade the benefit of this discount. Do you wonder we did a good business?

If one will put forth an earnest effort along the lines I have mentioned, he will find it will aid materially in making the season a success.

Some of the locals we used were: "Watch for Santa Claus at Taylor's Drug Store." "Save 25 to 33 1/3 per cent on Christmas purchases at Taylor's Drug Store." "Watch our Christmas windows for bargains. Taylor's Drug Store." "Complete new line of Christmas gifts at Taylor's Drug Store."

This year I made special plans for the holiday business. One thing which I should like to mention is my purchase of a set of Onken

SANTA CLAUS

—AT—

TAYLOR'S DRUG STORE

Brand New Stock

WATCH OUR WINDOWS!

Save 25 to 33 1-3 per cent.

SOME OF THE
NEW UP-TO-DATE GIFTS
WE OFFER ARE

Jewel Cases Hand Bags [adult and infant] Comb and Brush Sets Collar Boxes Cuff Boxes Sewing Boxes Infant Sets Post-card Boxes Necktie Boxes Work Boxes Music Rolls Music Bags Cigar Trays Ash Trays Toilet Sets [ebony, stag, etc.] Tourist Sets Cloth Brush Sets Manicure Sets	Mirrors Baby Records Xmas Garlands Card Holders Post-card Albums Stationery Perfumes Cigars Hat Brushes Portfolios Scrap Books Paper Knives Holly Wreaths Cigar Cases Novelty Gift Boxes Holly Sprays Post-cards [up to \$1.00] Gift Books Magazines
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We have bought these right in the Chicago market and will give our patrons the benefit of our low prices. Wait for our display! It will be worth your time and save you money.

One of Mr. Taylor's newspaper ads.

people on either side of the street, and I may say here that a trim that does not take care of passers-by, far as well as near, loses a great deal of effect.

In the corner at the back I placed our Santa Claus run by clockwork. In the center, suspended on a cord swing, appeared the large doll which was to be presented to the successful contestant.

Various articles were displayed in this trim, including baby sets, toilet cases, shaving cases, combs and brushes, traveling cases, manicuring

Wood Fixture Younts obtained from the Oscar Onken Company of Cincinnati, Ohio. They save a lot of labor and more than pay for themselves. They include so many different display stands, which reduce the work of

arranging a trim to a minimum. This season I may run another contest, but along other lines.

In conclusion, let me wish you one and all a prosperous season.

BIOLOGICAL PRODUCTS IN PHARMACY.

Their Number Increasing—Some are Made from Germs Themselves, Others from the Blood and Tissues of Animals—Serums, Vaccines, Phylacogens, Tuberculin—An Unusually Good Story of Their Preparation.

By FRED I. LACKENBACH.*

This paper deals with the subject of Biologics. It is not intended as a technical treatise. It is designed rather for the commercial pharmacist, the man who handles these products for revenue, to whose interest it is to become conversant with the various products, the mode of preparation, their uses, and their proper preservation.

In the United States biological products are generally produced by the large pharmaceutical houses operating special laboratories under government license. They are marketed through the medium of the drug trade, which is the legitimate channel for their distribution. The average pharmacist however fails to appreciate the intimate relationship between these advanced therapeutic agents and those which have heretofore occupied his active attention, and as a consequence is neglectful of an opportunity to materially advance his professional status. Indeed, the intelligent handling of these products offers an exceptional opportunity to the pharmacist to elevate his calling to a higher plane.

In this field he need not fear the department store, nor the mail-order house, nor the professional price-cutter, for these products cannot appeal to the laity to be employed in self-medication.

Nor do these products appeal to the unprogressive and slothful physician. Their effective application is founded upon accurate clinical and bacteriological diagnosis. How many of your medical friends possess microscopes

and are able to differentiate the various pathogenic (disease-breeding) organisms?

The alert physician is quick to perceive the advantages of a scientific and specific therapy that draws the populace away from the evils of self-drugging. He is also able to estimate the value of keeping his patients under close observation and the psychical effect of a cleansed skin and a needle puncture.

Then each individual is "a law unto himself." *A teaspoonful three times a day after meals* is a useless slogan when it comes to the administration of biologics. The indications, dosage and mode of administration are largely matters of individual observation and personal idiosyncrasy. There is no known means by which an individual's resistance or recuperative power may be gauged beforehand. And when a substance is introduced directly into the circulation, there is not an ever-watchful and long-suffering stomach to stand guard over the vital organs. So one must needs be careful. There is no such thing as drawing hard and fast rules in the administration of these products. A physician before administering the second dose must know as accurately as possible the beneficial or untoward effects of the first. This necessitates his having clinical experience and some knowledge of laboratory diagnostic measures.

Therefore, since so much is dependent upon the administration of these products, it is readily apparent how important are the products themselves. It is the pharmacist's business to handle these products with a care bordering upon reverence; and when he has grasped some of the fundamentals governing

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their production, he will handle them in that way.

PHARMACEUTICAL PROCESSES USED.

The science of bacteriology is the basis upon which rests the manufacture of biological products. Their actual production, however, is dependent upon the application of processes that are distinctly pharmaceutical. There is scarcely a pharmaceutical process one could mention that has not its application in the biological laboratory.

Maceration, filtration, digestion, distillation, evaporation, sterilization, desiccation, levigation, dialysis, precipitation, and physiological assay are some of the processes that occur to the writer offhand. These are common pharmaceutical procedures in the biological laboratory. The fact that more refined methods are employed, such as vacuum evaporation and filtration, filtration through porcelain, steam and dry-air sterilization, centrifugalization, and other methods requiring special apparatus, does not alter the fact that the processes are essentially pharmaceutical.

Another striking parallel is found in the finished product. There are: *Pills*, veterinary blackleg vaccine in pill form; *Triturations*, blackleg vaccine in the form of accurately divided powders; *Tablets*, Calmette's tuberculin ophthalmic test tablets and the bacterial vaccines and tuberculins in tablet form; *Capsules*, Moro's tuberculin ointment, which appears also in collapsible tubes. This also is a true *ointment* composed of 50 per cent Koch's old tuberculin incorporated with lanolin. Then there are: *Mixtures*, the bacterial vaccines; *Emulsions*, tuberculin bacillen emulsion, which is more properly a suspension; and *Extracts*, which instead of containing the soluble elements extracted from vegetable drugs, contain substances evolved by bacteria in their growth in artificial culture media. And it might here be added that from their physiological effects there would seem to be an intimate chemical relationship between certain bacterial toxins and some very poisonous alkaloids such as *ricin* and *abrin*.

Bacteriology is a science which should have a place in the curriculum of every college of pharmacy. Problems of sterilization, fermentation, and the rôle of bacteria in disease, might well demand the pharmacist's careful consideration.

It was not until the 8th Revision of the

United States Pharmacopœia that this class of products received official recognition.

Antidiphtheric serum is the pioneer in this respect. Tetanus antitoxin and vaccine virus have been accepted for inclusion in the next, the ninth, revision of the U. S. P. In the past decade these products have multiplied to an astonishing extent. Millions of dollars are now invested in their production and dispensing pharmacists have even taken to specializing in this field.

In describing the various products found upon the market, this paper will deal first with those products official, or about to become official, in the U. S. P.; secondly, with those products which have been passed upon by the Council on Pharmacy and Chemistry of the American Medical Association and included in New and Non-Official Remedies, 1912; and lastly with those products which are of more recent origin and which for some reason are not officially recognized. Following a description of these products I shall compare the different classes of bacterial derivatives.

SERUM MANUFACTURE.

Serum Antidiphthericum.—Diphtheria antitoxin is official in the 8th Revision of the U. S. P. It is described as "a fluid separated from the coagulated blood of a horse immunized through the inoculation of diphtheric toxin." It is recognized also in the French, German, and Spanish Pharmacopœias. It is marketed in the forms of *serum*, *globulin* or *concentrated*, and *globulins*, *dry*. The serum only is official.

The process of preparing diphtheria antitoxin is characteristic of the preparation of serums in general; so it will be dealt with in detail.

The initial process is the securing of a pure culture of diphtheria bacilli from a throat infected with the disease. A pledget of sterilized cotton mounted on a swab is applied to the diseased tissue and then smeared on a slant of Loeffler's blood-serum media contained in a test tube. This is placed in an incubator kept at the body temperature for twelve or more hours, when numerous, roundish, pin-point colonies will have formed upon the surface. Among these will be found pure cultures of the Klebs-Loeffler diphtheria bacillus.

From these pure cultures other tubes are planted which serve to inoculate large flasks

of specially prepared bouillon. The flasks are then placed in an incubator, where in the course of five or seven days countless millions of diphtheria germs are grown, giving rise to large quantities of virulent diphtheric toxin. This toxin is an exceedingly toxic substance and is principally responsible for the destructive effects of the diphtheria disease. Trikresol is then added to the contents of the flasks to kill the germs and the product is then filtered through a Berkefeld—an unglazed porcelain—filter, filtration being facilitated by the employment of vacuum pressure.

The filtrate freed from germs contains the soluble products elaborated by the growing and multiplying germs and is known as *diphtheria toxin*. This toxin is standardized by inoculating guinea-pigs of 250 grammes weight with graduated quantities of toxin. The smallest quantity proving fatal to the guinea-pig within a period of four days is called the minimum lethal dose and this is employed as a basis for inoculating the larger animals.

IMMUNIZING THE HORSES.

Now comes the production of the antitoxic serum. Perfectly sound horses are injected subcutaneously with gradually increasing quantities of the toxin, beginning with one or more lethal guinea-pig doses and increasing, as the animal acquires immunity to the toxin, to perhaps a hundred thousand times that quantity—in volume approximating 0.1 Cc. to 250.0 or 500.0 Cc. of the toxin. The injections are given at intervals of a few days and continue over several months—until the animal's maximum immunity is reached. As the animal develops immunity to the toxin, *antitoxin* is formed. This antitoxin is a reaction product of the living organism. The body cells are attacked by the poison, and if not destroyed are stimulated into the overproduction of *antibodies* capable of combining with and neutralizing the poison (Ehrlich).

The horse is allowed to rest for a week or two, during which a preliminary test is made of the antitoxic strength of his blood serum. If this comes up to requirements the animal is bled by passing a cannula attached to a sterilized rubber tube into the external jugular vein. From five to ten liters of blood is drawn off into sterile parchment-covered jars or blood tubes which are set aside to allow the separation of the serum from the clot. The supernatant fluid is then siphoned off and to

it is added 0.4-per-cent trikresol as a preservative. The product, then filtered, constitutes the *diphtheria antitoxin* of the market.

The physiological activity of antitoxin is determined by the number of immunity units contained in each Cc. This may vary from 200 units in poor serum to upwards of 1500 units in high-grade serum. The *unit* is the measure of *antitoxic power*—not of weight or volume. It is an arbitrary quantity based upon physiological test—the neutralization of toxin by antitoxin in the body of the guinea-pig—which animal is highly susceptible to the diphtheria bacillus and its poisons.

STANDARDIZING THE SERUM.

Under the Act of Congress approved July 1, 1902, all diphtheria antitoxin sold in the United States is required to conform to the standard established by the U. S. Public Health and Marine Hospital Service. This standard is based on the Ehrlich immunity unit preserved at the Royal Institute for Experimental Therapy at Frankfort-on-the-Main. Antitoxins of foreign production are standardized and sealed in government laboratories before they are marketed, but in the United States antitoxins are tested in comparison with the government standard unit in the laboratory of each individual producer. This standard unit is prepared and preserved with the most exacting care at the Hygienic Laboratory, Washington, D. C.

At intervals of two months about 10 Cc. of the standard unit serum is distributed to each of the licensed manufacturers. This is a glycerin solution of dried antitoxin and properly diluted contains one antitoxic unit in each Cc. This standard antitoxic unit is used to standardize a laboratory test toxin which determines that amount (approximately 100 fatal guinea-pig doses) which just equals or neutralizes the unit when the two are mixed together and injected into a 250-gramme (standard weight) guinea-pig, the life or death of the guinea-pig within a period of four days serving as indicator. The strength of all unknown antitoxins is tested against this standardized test toxin.

Thus it is seen that the process of testing antitoxin may be compared with an estimation in volumetric analysis, but instead of a chemical this is a physiological test. The body of the guinea-pig is the container in which the titration is made, its life functions are the

indicator, and its life or death the end reaction.

CONCENTRATED ANTITOXIN.

Globulin Antitoxin—Antidiphtheric globulins or concentrated antitoxin—represents in a concentrated form the antitoxic elements of the natural serum. The Gibson method for extracting the globulins from the serum is most commonly employed. It is briefly as follows. It will be observed that starting with the serum above described, the preparation of globulin antitoxin is entirely a chemical and pharmaceutical process.

A quantity of antitoxic serum is added to an equal volume of a saturated solution of ammonium sulphate. A heavy, flocculent, waxy precipitate of the serum globulins results which is separated from the serum-albumin, nucleoproteids, and other inert substances by filtration. The precipitate, containing most of the antitoxin of the serum, is added to a saturated solution of sodium chloride in which the antitoxic- or pseudo-globulin goes into solution, leaving behind the insoluble euglobulins. These are separated by filtration, the filtrate containing the antitoxin of the serum taken. The antitoxic globulin is then precipitated from the salt solution by the addition of acetic acid. The resulting heavy, flocculent precipitate is separated by filtration and dried between layers of absorbent filter paper. The white, waxy mass is then placed in a bag of dialyzing parchment and dialyzed in running water for several days, during which the mass gradually liquefies to a fluid resembling the original serum. This is neutralized with sodium hydroxide and the dialysis continued until it is freed from all adhering salts, etc.

This fluid is from one-half to one-third of the original volume of the serum, and bears most of the antitoxin originally contained. Sodium chloride then restores the normal salt content and a preservative is added. Finally, the globulin antitoxin is filtered through paper, then through a Berkefeld filter, and tested in the same manner as is the U. S. P. antitoxin.

This product, still further concentrated and dried *in vacuo*, is the *dried globulin antitoxin* which is intended for the extemporaneous preparation of the fluid antitoxin by dissolving the substance in sterile, distilled water.

OTHER SERUMS.

Tetanus Antitoxin is proposed for inclusion

in the 9th Revision of the U. S. P. It is official as *Serum Antitetanicum* in the Belgian, French, and Swiss Pharmacopœias. Both liquid and desiccated preparations are recognized by the French Pharmacopœia. Like diphtheria antitoxin, it occurs on the market in the serum, globulin, and dried forms.

Tetanus antitoxin is described as the blood serum of horses immunized to the toxin of the tetanus bacillus.

The antitetanic serum sold in interstate commerce in the United States should conform to the standard established by the U. S. Public Health and Marine Hospital Service. This standard is defined as follows: "The immunity unit for measuring the strength of tetanus antitoxin shall be ten times the least quantity of antitetanic serum necessary to save the life of a 350-gramme guinea-pig for ninety-six hours against the official test dose of a standard toxin furnished by the Hygienic Laboratory of the Public Health and Marine Hospital Service."

Antitetanic serum dried is employed as a dusting powder in the treatment of infected wounds.

The two serums described above are classified as *antitoxic sera*. Another group embracing a considerable number of products are the *anti-bacterial sera*. In the preparation of these, instead of employing the bacterial *toxins* in inoculating the animals, the respective bacteria themselves are employed in the forms of virulent, attenuated or killed cultures. These serums are directed against the bacteria present in the disease, rather than against the neutralization of their toxins. A brief summary follows. (See New and Non-official Remedies, 1912.)

Antistreptococcus serum is official in the French Pharmacopœia. It is prepared by immunizing horses with virulent cultures of streptococci.

Antidysenteric serum is the blood serum of horses immunized against the Shiga bacillus.

Antigonococcic serum is prepared from the blood of rams immunized against both dead and living cultures of virulent gonococci.

Antimeningococcic serum is the blood serum of horses immunized against the meningococcus of Weichselbaum (*diplococcus intracellularis*).

Antipneumococcus serum is the blood serum of horses immunized against pneumococci.

Antistaphylococcus serum is prepared from

the blood of horses immunized against staphylococci.

Antitubercle serum is prepared by treating horses for several months with the toxic products of the tubercle germs.

Antityphoid serum is a serum obtained from horses which have been injected with killed cultures of bacillus typhosus.

Normal horse serum is obtained from normal animals as distinguished from that obtained from horses undergoing the process of immunization for the production of curative sera. It is employed to check hemorrhage and acts by increasing the coagulative power of the blood. Normal serum from other animals has also been employed for this purpose.

Two very interesting examples of serums obtained by inoculating animals with substances not of bacterial origin are seen in hay-fever serum and snake-bite serum.

Hay-fever serum (Pollantin), Dunbar's serum, is obtained from the blood serum of horses which have been immunized with pollen toxin. It is therefore an antitoxic serum corresponding to the toxins or poisonous proteids obtained from ragweed and other plants of the *Graminæ*. It is employed as a local application to counteract the effects of pollen toxin in hay-fever.

Serum Antivenimeux.—Antivenomous serum is obtained from horses immunized against the venom of snakes. It is employed against the poison of venomous reptiles, as the viper, rattlesnake, etc.

Of the viruses there are two of immediate interest to the pharmacist—*vaccine virus* and *antirabic vaccine*. The former is proposed for inclusion in the U. S. P. 9th Revision.

VACCINE VIRUS.

Smallpox vaccine is perhaps the oldest and most extensively employed of this class of products. It is the material obtained from the skin eruptions of calves affected with vaccinia—cowpox—and is employed for the vaccination of human beings against smallpox. The organism which presumably gives rise to this disease has not been isolated, which fact necessitates the employment of the material (or virus) as an immunizing agent.

In the preparation of vaccine virus, the process of vaccinating or inoculating the calf and the subsequent curettage of the vesicles in the gathering of the lymph is essentially a

surgical procedure. The grinding of the "pulp," its incorporation with glycerin, and the manipulations leading up to the finished product, are pharmaceutical processes, though exception may perhaps be taken to the bacteriological methods employed to determine the presence of contaminating organisms or chemical poisons.

Antirabic vaccine is an emulsion of the cords of rabbits that have died as a result of the subdural injection of fixed rabies virus. The fixed virus is obtained by the passage of rabies virus through a long series of rabbits until the animals die after a uniform period of incubation. The cords are removed from the rabbits and dried over potassium hydroxide for a period of from two to fifteen days. The fixed virus in general use is of the strain employed by the U. S. Hygienic Laboratory, Washington, D. C.

As prepared for administration, each section of cord of the requisite attenuation is ground up with glycerin and salt solution into an "emulsion," the cords of gradually increasing virulence injected subcutaneously into the infected subject as a prophylactic against rabies. The object is to gradually produce an immunity to the rabies virus before the "street virus" takes effect.

BACTERIAL VACCINES.

Another important class of biological products are the *bacterial vaccines* or *bacterins*. These are suspensions of killed pathogenic bacteria in physiologic salt solution to which phenol or trikresol has been added as a preservative. They are standardized to represent an approximate number of bacteria to the cubic centimeter.

The bacterial vaccines may be "stock" vaccines, or "autogenous" vaccines. Stock vaccines may be "specific"—composed of one organism only—or "mixed" or "polyvalent," which are vaccines representing different strains of one organism, or strains of a number of different organisms.

Autogenous vaccines are prepared from the organisms giving rise to an infection in an individual case, and are employed in that case only. The preparation of such vaccines sometimes becomes necessary because of the peculiar nature of an infection. Pharmacists do not often have occasion to handle this special work. The stock vaccines are designed to

cover a broad range by embracing in their composition as many diverse strains of the organisms represented as possible.

The bacterial vaccines or bacterins comprise a very large class of biological products. They are composed of one species of organism only, or two or more organisms, the name of the product designating its composition. Thus, acne vaccine is a suspension of the *bacillus acnes*. Staph-acne vaccine contains in addition to the *bacillus acnes*, various strains of *staphylococcus*, etc.

One product of this group, *typhoid vaccine*, has come into very extensive use as a prophylactic measure against typhoid fever. Its use is now compulsory in the U. S. Army and Navy, and has become a routine measure in several European military organizations. Its use has practically eliminated typhoid fever from the military camps.

THE PHYLACOGENS.

The most recent development in this field is a new class of bacterial derivatives termed *phylacogens*. These are distinct from the bacterial vaccines in that they contain none of the bacterial cell substance. They are sterile aqueous solutions of the metabolic substances or derivatives generated by bacteria when grown in artificial culture media. The bacteria, first killed, are removed by filtration through porcelain. A considerable variety of pathogenic bacteria are employed in their preparation, the different organisms being present in about equal proportions. A basic phylacogen is first prepared and is known as *mixed infection phylacogen*. The specific phylacogens are prepared by adding to this basic material an equal proportion of the filtrate obtained by growing and treating the organism considered to be predominant in the pathological condition. For example, in the preparation of *rheumatism phylacogen*, a strain of streptococcus—*Micrococcus rheumaticus*—is grown and treated like the several organisms entering into the preparation of the basic phylacogen, and an equal portion of the filtrate from this product added to the mixed infection phylacogen. There are also marketed gonorrhea phylacogen and erysipelas phylacogen.

THE TUBERCULINS.

Another group embracing some four score products are the *tuberculins*. These are

employed in the diagnosis and treatment of tuberculosis. Some of these products are employed very extensively. They will be treated upon in another paper.

There are also the various tests for syphilis, typhoid fever, and cholera, and the various products for veterinary use, which time and space do not permit the writer to enumerate.

There are, however, three distinct classes of biologic products: Serums, those products derived from the blood of animals; viruses, those products in which the infective material itself is employed; and the bacterial vaccines, which contain the dead organisms in suspension.

In closing, the writer will quote from New and Non-official Remedies, 1912; published by the Council on Pharmacy and Chemistry, American Medical Association:

"The vaccines, viruses, and serums constitute one of the most important groups of drugs with which the physician has to deal. Some preparations of this group are specific cures for certain diseases; others are invaluable in prophylaxis and diagnosis. The great importance of exercising some degree of governmental control over these products was recognized by the passage by Congress in 1902, of a law entitled 'An Act to Regulate the Sale of Viruses, Serums, Toxins and Analogous Products in the District of Columbia, to Regulate Interstate Traffic in Said Articles, and for Other Purposes.' The law provides for the licensing of manufacturers who make these products. In order to obtain such a license it is necessary for an establishment desiring it to request the Surgeon-General of the U. S. Public Health and Marine Hospital Service to have an inspection made of its laboratories, methods, products, etc. This inspection is made by an officer of that service, and consists in a careful examination of the stables, laboratory facilities, methods, animals, collection of the serum, standardization, and tests for potency, purity, and amount of preservative employed. Samples of the products from licensed manufacturers are bought on the open market and examined at frequent intervals in the Hygienic Laboratory of the P. H. and M. H. Service. The inspection of the laboratories is repeated at least once a year, and if unsanitary conditions are found, or if the products are not what they are claimed, the license is suspended."

SOME CHRISTMAS ADVERTISING.

How Different Druggists Attract Holiday Shoppers and Stimulate the Demand for Gift Goods—Suggestive Newspaper Announcements—Booklets and Special Sales Schemes.

In view of the general prosperity this year, merchants look forward to a big holiday business. Have you made any plans for furthering the sale of gift goods in your own store between now and New Year? A little publicity given to that department of your business will bear fruit. The lure of department stores is so great that the druggist must do special advertising if he expects to accomplish much during the holidays. His Christmas offerings should be brought to the attention of Yule-tide shoppers with all the flare of the general retailer. There is nothing unethical about it. There is just as much ethics in honest business as there is in honest pharmacy. A little attention to the commercial side of pharmacy at this period of the year, a little judicious advertising, if you will, is more than justified by the results.

Many druggists have laid in a special stock for the season, and the question arises, "How can they dispose of it?" Our answer is advertise. Let the people know about your wares. Start early if you can, but remember that people who are thoughtful enough to buy their Christmas presents before the rush are in the minority. Most of us leave it to the last week. So concentrate your efforts on that period. Don't be afraid to spend a little money on your holiday sales. The profit justifies a little appropriation for advertising, say five per cent or more.

GOOD ADVERTISING MEDIA.

Employ the newspapers if you can afford it. If not, use circulars, folders, or booklets. In small towns druggists can employ the newspapers to good advantage. The McCoy Pharmacy of Dassel, Minnesota, have in the past run whole page ads. in the local daily. But, of course, such a splurge is not always possible, nor always necessary. Display ads. of a sixth of a page may be used to feature candies, perfumes, toilet sets, or any articles offered especially for the season. But they must be changed often or many items will escape mention. In large ads. it is well to run illustrations profusely, but in small insertions the dealer had better confine himself to type. Set

the headline in bold letters and make the text as pointed and forcible as possible.

Don't forget Santa Claus. Although this is the twentieth century, he is as much in evidence this season as ever before. Swing the old gentleman into your advertising if you have the space. If you have room, set him up in the window. Talk about him in your type. Tell how he obtains his supplies from your stock. Run his picture in your advertising. He is a pleasing old character, if he is fictitious, and casts a genial spirit over your advertising.

We have alluded to the distribution of booklets and circulars soliciting Christmas patronage. Next year druggists should try that particular style of advertising because the parcels post, which takes effect January 1, will enable dealers to supply the rural residents with gifts without defraying excessive carrier charges. The proprietor need only send a circular to each person on his mailing list to stimulate purchases. Let him give each reader a straight-from-the-shoulder talk on the gifts in stock, and at intervals throughout the ad. call attention to the fact that deliveries can be made by parcels post.

Remember that advertising does not stop with the newspaper page. It only begins there and should travel every legitimate path—posters, window trims, counter displays, circulars, and booklets. Wm. V. Dufner, Ph.G., proprietor of the Bradley Avenue Pharmacy in Peoria, Illinois, last Christmas sent out a letter printed on paper somewhat larger than ordinary writing stationery. It may appeal to some of our readers:

So this then, my friend, is my Christmas Greeting to you across the trees and chimney tops.

We have enjoyed a splendid business this past year, and at this season of good cheer and good will we want to thank you sincerely for your kind coöperation.

We earnestly trust the year just closing has brought to you and yours many heart throbs of friendship and abundant prosperity. And our wish for 1912 is unprecedented blessings.

Your friend,

BRADLEY AVENUE PHARMACY.

Peoria, Illinois
December twenty-second
Nineteen hundred eleven

WM. V. DUFNER, Prop'r.

B. S. Cooban & Co., of Chicago, employ a large bill-board placard to remind their customers of Christmas purchases. The paper is a white stock $2\frac{1}{3}$ by $3\frac{1}{2}$ feet in dimen-

THREE HOLIDAY SUGGESTIONS

**WATERMAN'S
IDEAL FOUNTAIN PENS**

The Best, \$2.50 to \$10.00

HUYLER'S CANDY
Always Fresh, 60c. and 80c. per pound

EASTMAN KODAKS
From \$1.00 to \$25.00

B. S. COOBAN & CO.

DRUGGISTS

63d Street and Normal Avenue

This bill-poster used by Mr. Cooban was of immense size, and is of course greatly reduced here.

sions. The ink is red and blue, making a very flaring ad.

W. G. Price, of Toronto, South Dakota, last year sent out a large four-page letter to attract Christmas trade. The paper was a yellow stock $8\frac{1}{2}$ by 11 inches in dimensions. The type was black. Mr. Price believes in special schemes that enlist the interest of holiday shoppers. Two plans that he tried were set forth in detail in the letter. To quote:

DON'T FAIL TO READ EVERY WORD OF THIS LETTER. Some place in it you will find a number—the duplicate of which has been filed in a box and deposited in the First National Bank. Mr. Peterson will be requested to shake the numbers and draw one. To the party producing the letter whose number corresponds to the one he has drawn, he will give a \$2.50 Gold Piece.

But better even than this, this letter means many dollars to you in savings if you will read and profit by it. First of all, we want to tell you of our profit-sharing scheme, the details of which many of our friends do not fully understand. Our new cash register prints for you a receipt for every cash purchase you make. These receipts are good for 10 per cent of their face value, as one-quarter of the purchase price of lockets, chains, bracelets, necklaces, brooches, scarf pins, cuff buttons, silver, ormolu gold, and articles without end. Supposing you have \$10.00 in register receipts.

These are good for \$1.00 on a \$4.00 purchase. That is, these receipts and \$3.00 in cash will purchase a \$4.00 article in the lines we have mentioned. Sort of worth while, isn't it?

And the reputation we have made for quality in Christmas goods is not going to suffer this year. We have, as always, a line to meet every purse.

The Fred Glass Drug Co. of Petoskey, Michigan, distributes a little booklet $4\frac{1}{2}$ inches wide and $6\frac{3}{4}$ inches high. The paper is a light stock, so that the booklet can be folded and mailed in an ordinary envelope. The cover bears the title "Holiday Announcement." Two of the inside pages read:

WE GUARANTEE TO SHOW THE
LARGEST AND GRANDEST DISPLAY
OF
HOLIDAY GOODS
EVER SHOWN IN THIS PART OF THE STATE

Everything new,
direct from the importers.

Specially Made, Designed, and Exclusive
Toilet Articles Manufactured
to Your Order.

One page in the Fred Glass Drug Co. booklet.

CHRISTMAS SELECTIONS

Made Early, before the lines are
broken, will greatly further your
own interests and convenience.

Goods will be sent on
approval to persons
known to this house.

SPECIAL GOODS

Many of our goods are made ex-
clusively for our Holiday trade, so
you get style as well as price.

Another page.

One feature common to much of the literature used for advertising purposes during the Christmas season is a list of the different articles that are offered for sale. The following assortments of goods and prices appear in the

booklet of the Fred Glass Drug Co., already referred to:

FOR THE LADIES.

Sterling Silver Novelties.....	\$ 25 to \$10 00
Silver Toilet Sets.....	2 00 to 25 00
Gold Toilet Sets.....	3 00 to 12 00
Ebony Toilet Sets.....	1 00 to 6 00
Walnut Toilet Sets.....	2 00 to 5 00
Rosewood Toilet Sets.....	1 00 to 3 50
Jewel Cases—Silver	50 to 3 00
Jewel Cases—Gold	75 to 5 00
Triple Mirrors	2 00 to 6 00
Hand Mirrors	10 to 5 00
Hand Bags	2 00 to 6 00
Manicure Sets	50 to 5 00
Music Bags, Fancy Whisk Brooms, Writing Sets, Post Card Albums, Stationery, Fountain Pens, Traveling Sets, Fancy Calendars, Perfume Atomizers, Handkerchief Boxes, Glove Boxes, Puff Boxes, Desk Novelties.	
Perfumes	\$ 10 to \$10 00
Toilet Waters	25 to 2 00
Brushes and Combs, Pictures, Photo Holders, Novelties of all kinds, Art Calendars.	
Books	\$ 25 to \$ 1 25
Box Candies	25 to 5 00
Candle Sticks—Bronze, Silver and Gold; Travelers' Drinking Cups, etc.	

FOR THE CHILDREN.

Books—linen.....	5c to 25c
Books—Stories for Boys and Girls.....	10c to \$1 50

TOYS.

Magic Lanterns, Railroad Trains, Street Cars, Electric Toys, Rubber Dolls, Moving Picture Machines, Candy, Stationery, Pictures, Post Card Albums, etc., etc.

FOR THE MEN.

Shaving Sets	\$1 00 to \$ 5 00
Collar and Cuff Boxes.....	75 to 3 00
Collar and Cuff Bags.....	50 to 2 00
Safety Razors	1 00 to 5 00
Smokers' Sets	1 50 to 4 00
Tobacco Jars	50 to 2 00
Fancy Pipes	50 to 3 00
Hat and Clothes Brushes.....	35 to 2 50
Necktie Boxes	75 to 2 00
Fancy Ink Wells.....	35 to 75
Desk Novelties	25 to 50
Bill Books	50 to 2 00
Fountain Pens	50 to 2 00
Post Card Albums.....	50 to 1 50
Cigars, per box.....	1 00 to 6 00
Traveling Sets	1 50 to 5 00
Muffler Boxes	50 to 2 00

Card Cases, Fancy Playing Cards, Toilet Waters, Stationery, Ash Trays, Necktie Holders.

DEN SUPPLIES of all kinds.

Den Pictures, Match Boxes, Pipe Racks.

Shaving Mugs and Brushes.....	\$ 50 to \$ 2 00
Military Brushes	1 00 to 8 00

FOR HOME AND CHURCH.

Christmas Candles, Tree Ornaments, Christmas Bells, Santa Claus Snow.
 Trimmings and Signs of all kinds for Christmas.
 Bibles, Empty Holly Boxes, Christmas Postals, Christmas Seals, Books of all kinds, Candle Holders for Trees, Diamond Dust, Tinsel, Etc., Christmas Tree Holders.

It will be noticed that the foregoing lists are divided into sections for the men, for the women, and for the children. That is a wise arrangement, because it enables the reader to make a selection much more quickly than he could from a miscellaneous lot of gifts.

DISPLAYING THE GOODS.

By way of supplementing the newspaper advertising one must look carefully to the display of the goods. Christmas wares should be exhibited in the window. If the druggist has laid in a large stock, it is advisable to set a few tables in the store, and show goods on them so that customers walking down the aisle can see the gifts at close range. The counters, too, should be made to do service.

The window should resemble that of a pretty bazaar and present a selection so varied that all gift buyers will be attracted. Use price-cards liberally. The perplexing question at this time of the year is what articles to buy that shall combine moderate cost with other good qualities. People can see by glancing in the window how appropriate are the gifts on display, but they can't tell the prices unless they be plainly indicated. Christmas candies are, of course, one of the most important items during Christmas week, and should have conspicuous position everywhere. Military brushes make useful gifts. Toilet and manicure sets are nice presents for women, and should be brought to the front. Cigars in Christmas boxes are good sellers. Pipes, briar or meerschaum, are more popular than ever. Then there are cigar trays and other articles that appeal to smokers. Fountain pens are an old standby and can always be depended on for a good volume of business.

Cutlery and books, too, make good gifts. In fact, almost everything of genuine usefulness can be sold as a Christmas present. Suggest all of the mercantile articles that you possess to buyers. There is no accounting for taste. Furthermore, a reaction has set in

against giving trumpery and ornamental articles as Christmas presents in favor of things that are sensible and useful. Tell the public in your advertising that your stock of Christmas gifts have been selected with an eye to their utilization; that while you have large varieties of holiday merchandise in which every taste and style are centered, still service and practicability have never been overlooked. This argument will appeal to the great mass of people who are looking for sensible goods as Christmas gifts.

THE POWER OF SUGGESTION.

Many persons have no idea of what they want until they get into the store, and then are only confused by the mass of suggestions. Help them out in advance by suggestions in your advertising.

Here is a good pointer for the advertiser: For the infant there is so and so. For the boy there is a certain line of goods. For the girl there is that list of articles to suit her taste. For the matron there are things of service in the household. For the men there are the razor and other articles. Enumerate the gifts that belong to these classifications.

Another good plan is to give lists of articles for certain sums. For instance, 5 cents will buy so many things, 10 cents so many articles. For 25 cents, have another list. Let 50 cents head other bargains, and so on. What holiday shoppers look for principally are suggestions. Their minds become confused before an embarrassment of riches, and both the ads. and the talk of the clerks must help customers to make their selections.

Of course, there is a large personal element in selling holiday goods. The good storekeeper is a judge of human nature, and the moment Mrs. Smith or Mrs. Jones enters his store, she is greeted with sound suggestions as to what to buy. He puts himself in the proper attitude, listening deferentially to her ideas, volunteering suggestions of his own, until the woman goes away happy in the completion of her Christmas purchases.

In his daily personal intercourse with customers, he is an encyclopedia of suggestions, so should he be in his advertising. And if his ads. properly express the sentiment of the season and the business, his Christmas advertising will prove suggestive, timely, and helpful.

"MY BEST PAYING SIDE-LINE."

The Ninth of a Series of Commercial Articles—The Author Finds This the Big Season for Jewelry and Silverware—The Range of His Stock—How He Buys the Goods—What Brands to Choose—How to Run the Department.

By E. L. MAFFITT,
Oakdale, Iowa.

My best side-line in a financial way is jewelry and silverware. Any druggist who goes into this business must conduct it in accordance with the conditions that obtain in his particular locality. For that reason our method of running this department of the store is made to conform with our own patronage.

We do not carry a large line of silverware and jewelry, but we try to keep it fairly complete. Our assortment is just large enough to show people that we have such goods in stock. The jewelry sets next to the cigar-case, and the silverware, in turn, rests in a case next to the jewelry.

THE JEWELRY LINE.

Our line of jewelry includes a few chains, fobs, brooches, cuff buttons—in fact, all the little things that are usually given away as presents. In watches we carry only the cheaper ones. Later on I shall explain how we handle watches, diamonds, and other ware that sell at a high price.

For a time we sold the highly advertised Ingersoll watches, and personally guaranteed them. But we did not like the methods of the Ingersoll people, and now we do not recommend any of our fellow druggists to handle this brand. The makers do not make the concessions to the dealer that some houses do.

When we carried their watches, and whenever we guaranteed them personally, we did so at a danger of loss. If we returned defective watches to the company, they charged us 25 cents for exchange. We remonstrated, but were informed that that was the Ingersoll way of doing business, and that the house did not want us to personally guarantee the watches. One of our customers sent his watch directly to the Ingersoll establishment and never received any reply.

We now handle the "Derby" watch that sells for \$2.00, and the "Mentor" and the "Guide," which retail for \$1.00. These watches are obtained through Otto Young & Company of Chicago. We also sell a \$1.00 watch which we buy from Butler Bros.; it is called the "Uncle Sam." The latter bears a printed slip which tells the purchaser to return the watch to the dealer if it is unsatisfactory. When we send back the watches we are given credit for them, so you see we now carry watches which are guaranteed to us in a manner that enables us to put our own personal warrant back of the goods. That is what counts. Since we have put in such a line we have no further trouble over the question of guaranties.

SILVERWARE.

We handle the different lines of silverware. But when we find a brand that is advertised in the mail-order catalogues, we omit it from our stock. You may think that some brands are unavoidable because of their great popularity. But the fact remains that the druggist can omit from his stock any brand of silverware that he chooses. He can do that for the simple reason that he can kill the sale of any piece of silver and jewelry by merely withdrawing from it his own personal guaranty.

Let me illustrate this from some of our own experiences in the last three years. Our big sales are in December. Three years ago all of the silverware which we sold was "1847 Rogers." Later we were surprised to see this line mentioned in mail-order catalogues. We proceeded at once to reduce the demand for this particular brand. As a result of our efforts the following year less than one-fifth of our sales were of Rogers goods. In December, 1911, we made one sale only of this ware. It consisted of a half-dozen dessert spoons, and the only reason we sold them lay in the fact that the customer who bought them was matching some table ware which he

had obtained from us before. I merely mention all this so you will see that the main thing to do is to work up a reputation for yourself as to quality so that you can sell any good brand that you may choose.

DIAMONDS.

A word as to our method of selling diamonds and similar pieces of jewelry. We deal with Otto Young & Co. of Chicago, who, without doubt, are as liberal, prompt, and reliable a firm as one can find. They do not send goods on consignment. But if you have a customer who wants something not in your stock, they will send you an assortment on memorandum. If you wish to sell a diamond or a watch, find out how much the customer is willing to pay and get a fair idea of what he wants. Then order a number of different styles from which the customer may make his selection. Let him understand that he is under no obligations to make a purchase if the goods do not suit him. The dealer is allowed to keep a shipment ten days. I kept it longer this winter, as the roads were so bad that my customers could not get here in that time. You can rest assured that if you do your part, the wholesaler will do what is right.

ENGRAVING DONE FREE.

We have no jeweler, so we send our engraving either to Otto Young & Company or to an engraver in a near-by town. Their charges vary with the kind of work, but any one may obtain a list of their prices. I send most of my engraving to a neighboring town because I can always find some one to take it there and thus save carrier charge.

We advertise that we do engraving free. In buying new goods, wherever I can, I have the goods engraved by the jewelry house from whom I am making the purchase. It costs us to have engraving done, but we make a good big profit on what we sell and can, therefore, afford to make no charge for the engraving. Of course, the amount of free engraving that we offer is restricted. We permit only script and old English letters, not over three of either, nor more than one name. This is explained to the customer at the time of the sale.

In conclusion let me say that a good business can be worked up in jewelry and silverware by the retail druggist, but it must be done on a quality basis by a druggist who has a reputation for quality to begin with.

THE INFLUENCE OF LITTLE THINGS.

By WILLIAM F. MORGAN, Ph.G.,
Brooklyn, N. Y.

During the course of my business experience I have found a sense of true satisfaction and worth, not to myself alone, but to my employer and the public, in little things. They aid us in this profession, and anything that helps to make work a pleasure is an asset.

To my mind it is a very poor business that is conducted with no feeling of sentiment attached to it. We hear that "there is no sentiment in business," but I believe there is.

The clerk who has a clean, tidy personal appearance, whose face shows an equally clean inner self and a cheerful smile, who tells the time of day to the customer, be he man, woman, or child, and assists them in what they may want, who will sell stamps as willingly as medicine, who makes a tidy package, shuts drawers completely, puts bottles and containers away in their proper places at once, performs in these acts a number of little things which enhance his value to his employer, to himself, and the business world.

Speaking of a tidy package, never use paper too large or try to use too small a piece, nor tie with string a package containing capsules, pills, or powders. Use elastic bands or sealing-wax, which help to preserve a professional air about your work.

When prescriptions are compounded for foreigners who may not be able to read English, see whether they thoroughly understand the directions for their use. Explain in as simple language as you can what is needed and they will appreciate it. You can deliver to the customer without saying a word in this connection whatever you have compounded, but the influence of a little thought on your part has a weighty effect upon the patron. People observe that you are interested in their welfare when you see to it that they know how to administer the medicine. It may be said that such explaining should be done by the physicians, but they are busy men, and some are less thoughtful than others.

At this time I may well call attention to another little thing under the head of "explaining." Whenever you have a mixture in which effervescence takes place, such as spirit of

mindererus, Basham's mixture, etc., always explain that it must be kept in a cool place. A gummed sticker may be used for the purpose of explaining that in case the fluid were placed where it would be warmer than it was when made, additional gas might be given off; and that if corked too tightly the bottle would break. One might add that it had not soured or fermented.

There are times when a change of color will be noticed, as in freshly prepared elixir of the phosphates of iron, quinine and strychnine U. S. P., or ointment of resorcin compound N. F., and some proprietaries. Mention of this to the customer satisfies him and saves lots of talk at the wrong time—*i.e.*, after the damage is done.

One's influence with children has its good effect. Know them. Select for them the best. Give them no mutilated coin in change. Let their parents know that they can get as good treatment as their elders. Don't be above saying "Hello" to them on the street. Still conduct yourself in such a manner as to avoid undue familiarity. Behind the counter, be careful not to let the public get the impression that you are avaricious or in common terms "soaking them." It is my impression that they don't like to think that they are making you rich.

Some may say, "I don't care about the public, I am looking out for myself." They do care or they would not be in business. I do not believe that men actuated by that spirit make a permanent success, for we must all be governed by a fair regard for one another.

Have the confidence of the physician. Let him know that you dispense what he likes, even if it be of proprietary manufacture, and he does not specifically note the maker's name. Have him feel that it is not necessary to do so. This is a little thing in itself, but it has considerable significance.

A good and lasting impression can be made in the arrangement of the store and the windows. Never display in your windows toilet paper and laxative waters together, syringes, douche pans, etc. If your customers find that

they are well treated in dealing with you for their other needs, when they want articles of this kind they will come and ask for them. Such articles displayed create a more or less morbid interest in the young which we should guard against, and is worthy of your consideration.

Because the public do not see behind your prescription counter don't lose sight of the necessity of keeping all utensils as clean as the dishes you eat from, and the towels on a par with what you have at home.

In summing up, I find that the golden rule is still very applicable to our use.

"SKIN GAMES" I HAVE MET.

The Bunco Man—His Affable and Amiable Ways—How He Fleeces the Lambs—"Sure Things" that Tempt the Unwary.

**By H. KALLIWODA, Jr., Ph.C.,
San Francisco, Calif.**

Bunco games are as old as the sands of Egypt. But they are still worked for one of two reasons: either the victim is green, or he is taken unawares and forgets the old trick. The old saying is that "a sucker is born every minute." So for those who have not yet bitten, but who may bite, the following little "flimflams" will serve as danger-signals. When you meet a danger-signal, slow up—never round the curve too fast, for you may run over an unseen bank; and believe me, you'll cuss your speed!

A good general rule is that when a promoter, strange salesman—I mean one from a strange concern—or an overaffable customer comes to you, slide your brakes a little and get the emergency ready. Think the proposition over, tear it to pieces, look at it from all sides, eye it with suspicion, and—*take your time*. If you are in a hurry, tell the man so—but don't grab a thing because it looks good. It may be a red-hot gold brick, and then you'll burn your fingers.

CONFIDENCE MEN SMOOTH LOOKING.

Those who come for bunco purposes are generally men to all outward appearances, gentlemen. They are well dressed, good looking, elegant and suave in manner and speech, and generally educated. This sort of man is to be most dreaded—he is always after a big haul. He will sell you stocks—interests in mirages—or he may give you something for nothing, something for your testimonial because you are a prominent business man.

One favorite game of these "smooth articles" is to give you a lot in some beach whose future is golden. The lot is yours for

a testimonial and the use of your name. He will show you maps and tell you all about it—what a fine lot he has given you—wouldn't you like to buy the adjoining lot for \$500—it would make a nice residence lot, while the gratis lot is the finest kind of a business location. Yes, maybe you want to take a chance and buy one from this "nice man." If you do, you are stung for \$500 more than you were after he had given you the first lot. Well, maybe you're hard up or a bit cautious and don't buy a lot. But if you take the little present you're stung anyway. For surely you will pay for bringing the title down, only \$20. Then they find that next year's taxes are due on your \$1500 lot. Yes, taxes must be paid. You give the "nice man" the title fee and the taxes. Next week he sends you your title on a nice clean piece of paper. "Oh," you cry. "Gee, I'm a popular gink. This just for my name and testimonial!" You read the enclosed letter, and you are informed that the street work is about to be done and \$30 surveyors' fees are asked of you. A month later you are sent a bill of \$100 for street work. Then you investigate. You travel a hundred miles to see your beautiful lot and street work. But after walking along the shore for forty miles you find the lot given you is now at the bottom of the ocean, or may be in some gully. Oh, gee—you're stung!

A CIGAR HOAX.

But you say never again. That was yesterday. To-day a slouching Mexican with heavy overcoat drawn about his ears slinks up to you and whispers: "I bringa da gooda cigarros. I smuggle them in. Looka here,"

and he opens a nice fancy box of 100 cigars with a nice silk ribbon and plenty of gold paper. He quickly pulls out a bunch of fifty and says, "Look." You look at the ends—they seem to be nice, and you are interested. Quickly and with apparent carelessness he pulls one out from the center of the bunch, cuts off the end and shoves it into your mouth. Before you realize what has happened he has a lighted match at the end of your Havana and you are puffing the finest smoke you ever tasted. Isn't it cool, rich, and aromatic? "Gooda cigarros—no? \$10 a hundred—you like to buy? I hurry—police—" You may buy or you may beat him down to \$7.50, to which he skilfully and reluctantly agrees. He leaves as silently and mysteriously as he entered. And you are going to sell the "El Regias" for 15 cents each.

Carefully you remove the dainty silk ribbon and—another lemon—you are looking at a bunch of stogies, wondering how those "El Regias" were transformed to "El Ropos." They weren't. The greaser had that "swell smoke" spotted. It was the only one in the bunch and cost you \$10.

ANOTHER DECOY.

A third type of swindler is the man with a "good preparation" and "We are going to spend a fortune advertising" story. I was in a country town when I met this "skin game." The salesman came in and said, "Good morning, my name's Skinner, etc.," and then started handing out this line of talk: "Oh, I'd like to show you the squirrel poison you are going to sell this season. It's a wonder, and we are going to pour gold down your main street to advertise it. I'd like to sell you some at our special figure." The druggist told him that business was too slow, and was met with: "This is a gilt-edge proposition, but the goods are new to you and I don't blame you for not stocking up—I'll just give you a fifty-cent box gratis so that you can supply your first demand, and here is our card. We have a branch office in your city and do business direct. If you want more, just call us up. It's \$4.00 a dozen." And with that he left. A week later a farm wagon stopped in front of the drug store and an old farmer came in and asked if they carried 3X squirrel poison. When told they did he said: "Well, give me about a hundred cans. I'm gonna set my 20 acres out with thet 'ar stuff. It's the darned

best thing I ever saw to take the sap out'n a squirl. Yuh can't git it everywhere, neither." The druggist said he was sorry not to have more than one can in stock, but would get the rest for him. So the farmer said he'd be around for it on his next week's trip. The druggist went to the 'phone and ordered 1 gross at \$4.00 a dozen less 5 per cent for cash. The goods arrived and he paid \$45.60 cash. The sequence? One gross cans of sawdust and sand on hand! Bit again! Needless to say the other three stores in the town were victims also, and the company skipped.

THE CHARITY RACKET.

Another very popular humbug is the selling of tickets for an entertainment to be given in a neighborhood hall for the benefit of "John Jones, the barber—you know—down the street a few blocks. He was badly burned in a fire and lost his sight. He was a neighbor, and his friends are your customers. Buy a couple of tickets and come over to the minstrel show." Your tender spot is touched and you don't want to offend the "gentleman" doing the charity stunt, so you fall for it, and on the tenth of the next month you and fifty other easy marks stand out in the cold in front of a closed hall. The crooks had time to work the whole city and "beat it." Stung again!

But by far the most popular "skin" is for a salesman to inveigle you into buying a bill of goods by juggling figures. This is practiced by representatives of respectable houses as well as others. The glib salesman has a fine article at \$2.00 a dozen. Buy a gross and he gives you two dozen free, which sell for \$8.00, the gross costing you \$24. He tells you he gives you \$8.00 off. That's a saving of 33½ per cent. He says this so fluently and nicely that you don't see through it right away, or else you don't stop to figure that those two dozen are only worth \$2.00. Well, maybe you're the "fall guy" again. If you are, when you come to you'll find you are loaded up with 14 dozen. None are sold yet, and they cost you \$1.72 a dozen instead of \$1.33. Another lemon song—to the tune of 14 per cent! Expensive song!

BLACKMAIL.

The crudest game I have ever heard of being pulled off is a blackmail scheme, rank and raw. A man came to a store where an unregistered clerk helps out and asked for 10 cents worth

of Rochelle salts. The boy took one of the ready-prepared 10-cent packages, wrapped it up, and sold it. Three days later the man came back and said the Rochelle salts had poisoned his wife—burned her stomach, weakened her heart, torn her bowels, and nearly killed her. The package contained powdered chlorate of potash instead of salts! He said he could prove it. He was going to sue for \$10,000 unless he could make a settlement. He would rather settle outside of court, because he had no stack of bills to prosecute, although his lawyer would take the case on the outcome. Mr. Druggist, fearing publicity and a ruined business, was eager to settle, and before he knew it his name was attached to a \$500 check. Later he thought it over, had the other 10-cent packages of salts tested, found no potassium chlorate, and putting two and two together, figured out that he was—stung once more!

FAKE OFFERS.

A little trick of some salesmen, cigar salesmen in particular, is to sell you a bill of goods for a window display. You get your bill of goods, you get a window display, and you get

a promise that when the free goods come in the salesman will bring them to you. Oh! lovely. The cigar factory gets the benefit of the window and you never see the salesman again. It's simply a game to get your order. The maker should pay you for your windows and pay well, for they sell his goods much better than bill-boards do, for which he has to pay handsomely.

Salvage sales are to be carefully investigated. I know of a case where a man bought 20 gross of porous plasters at 3 cents each. He also bought two cases of effervescing salts at 5 cents a bottle. He hurriedly examined his goods on top and down a little way. But when he opened his cases at his store, he was dumbfounded to find that the heat had ruined the bottom gross of plasters completely. They were solid as rocks! And water had ruined the lower portion of each of the cases of salts. These were "doctored up" before he examined them, of course. Another poor boob seen raising his right hand in the atmosphere with the "never again" speech!

Moral.—"Look before you leap. Then count ten before you bite."



The Modern Drug Store.

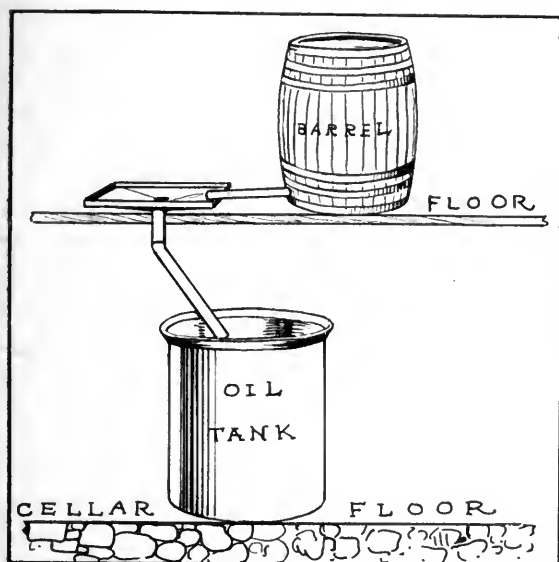
Stranger—(after looking about)—"Can you tell me where I can buy some quinine pills?"
[See editorial elsewhere in this issue.]

DOLLAR IDEAS

EMPTYING OIL FROM THE BARREL INTO THE TANK.

Henry J. Kamphuis, Fulton, Ill.: Our oil tanks are all down in the basement. We used to let the barrels of oil down and then pump the oil into the tanks. This was quite a job, so we invented a device such as you see in the drawing.

We had a tinner make a flat funnel about $2\frac{1}{2}$ feet square and about $3\frac{1}{2}$ or 4 inches deep. In the middle was a pipe about a foot long which went through the floor. Then we used a 2-inch conductor pipe which went from



How we empty oils into the tank in the cellar.

the funnel into the tanks. We obtained for the purpose three pieces of the pipe, one about 4 feet, one 6 feet, and one 8 feet long, according to the location of the tanks. Then we have a piece of gas-pipe about 6 or 8 inches long which we place in the barrel about 4 or 5 inches from the floor so as to let the oil into the funnel. We bored this hole in the barrel with an auger bit the size of the gas-pipe. We have a cork in the other end of the pipe, so that when we turn the barrel end up the oil will not come out after we have the barrel in place.

We pull the cork and let the oil run till the barrel is empty. This is a wonderful time and labor saver.

USING REAL COINS FOR PRICE MARKS.

N. E. Truman, Bainbridge, N. Y.: To simply lay a bright dime or quarter on an article displayed in the show-case seems, at first thought, a very neat way of marking the price. But it is too ingenious. We tried the plan and found that a large per cent of the customers did not "tumble" to what was meant. Questions like "Have you more money than you know what to do with?" or "Have you new coins for sale?" showed that our method was faulty.

When the purpose of the coins was explained, the questioner would exclaim, "How stupid of me not to see." His attention was diverted from the article displayed to his own mental process. To overcome this difficulty and still retain the advantage afforded by the novelty of coins as price marks, we hit upon the following improvement: On a small visiting card we typewrite with red ink the word "price" in capital letters. The coin or coins which equal the price of the article are then placed on the card below the letters. The result is a price mark which cannot well be misunderstood.

AN EASY METHOD OF DISPENSING POWDERS.

R. B. Conant, Hutchinson, Kansas: In making a large number of powders, after dividing them on a pill tile, a quick way to transfer each powder to the papers, already counted out and spread on the case near-by, is to use a putty knife and a spatula. Manipulate the putty knife with the left hand, putting the knife edge down on the tile and then sliding the spatula under the powder. The putty knife is used to push all the powder on to the spatula. Then the powder may be placed on the paper.

In dividing up a small number of powders, say twelve to eighteen, I put them on a powder paper and divide them there instead of on the tile. I always keep a small piece of cardboard cut the size of the powder paper. After the powders have been divided on the powder paper, I slip the cardboard under it. Then all the powders may be picked up on the board and by the use of a spatula can be shoved off onto the papers already laid out for them.

I find that both of these methods save time for me in filling a powder prescription.

SELECTIONS

SOME PEOPLE WHO COME TO MY STORE.

There comes creeping into my dose-and-price-crowded memory the beautiful spring morning when all the feathered warblers of nature were doing vocal stunts in the trees that would make even a slave to pills and powders chirp up and feel that the privilege of staying on earth and working nineteen hours per diem was a happy one. I gingered up, took a fresh grip on life, and decided to clean up everything around the store that even looked like work. I could feel vitality bristling from every pore. I entered the store, where the porter had everything shining like a sixty-cent stage diamond, I hurriedly entered the secluded precincts of my quiet little office and tackled the morning mail with all the vivacity of the proverbial duck that is reputed to have picked up speed when he spied a Junebug.

I had ripped open about one envelope bearing the pink stamp and a picture of the father of American liberty when there appeared, among the fumes of phenol and iodoform that were circulating in and out of my business boudoir, a tall, distinguished looking individual, wearing one of those shiny alpaca coats, an innocent looking white lawn tie, and a bunch of vines on the point of his chin. He looked the part of a Chautauqua warm-wind warbler who is strong on handing out cute sentences at the summer encampment at Boulder to the usual gathering of feminine freaks who have no chickens or children of their own and no mission on earth except to peek around in sad raiment and pant for higher life.

This particular consummation of the Darwinian theory quickly acquainted me with the fact that he was ambling up and down the earth in the interest of suffering humanity and the Skinnem Life Insurance Co. of New York, who were at present writing a contract that was simply something unheard of in the matter of benefits to the assured. It was a double-action, six-cylinder, high-g geared, quadropneumatic, reciprocating policy, absolutely incontestable, and for an additional assessment of ten cents down and ten cents a week, payable at the company's office in New York, the hereinaforementioned company agrees to see that the assured gets by St. Peter at the gate.

He was gasping for breath and fishing for his fountain pen to show me where to put my name when I gave him three seconds to evaporate.

The next disturber of my peace and dignity as an American commercial enthusiast was one of those lovey-dove little feminine confections, with an elegant assortment of hand-made blushes and high-priced hair enough to make the bearded lady in the museum dissatisfied with her job. She cast a scared glance in my direction, her lip did a tremble act perfect from long practice when she threw her talk factory in gear, and I began to absorb the intelligence that she was selling a book that should be in every home, an exhaustive treatise on every subject, from French-fried potatoes to foreign missionaries, with a goodly bunch of polished narrative about how to manage a husband, also how to endure life though married past the aid of the divorce court; and, best of all, this rare volume bound in limp calf in any color from picnic pink to the dull-dark-brown that you taste in the cold gray dawn of the morning after, only fourteen dollars.

It was here that my powers of endurance flunked on me, and every bit of bad temper and the fighting blood of my Southern ancestry were aroused. However, I decided not to murder her or drown her in her own blood, so I informed this ninety-pound consignment of human persuasion that I would buy one of these books, but I'd not buy two. She smiled one of those don't worry smiles as she crammed the heavy end of my twenty-dollar bank lithograph into her overgrown hand-bag, and flitted out, saying she hoped I'd be pleased with the work.

Again thinking I was monarch of all I surveyed, I pounced onto the letter on top of the pile and swore I would peruse its contents if the house was bombarded with heavy artillery. Presently there came a timid knock on my door, to which I did not respond. Then came a louder one, and then I thought surely the world was having its finish and quickly opened the door, fully expecting to meet the recording angel who was ready to check me up, but was surprised to meet my young hopeless, aged five, who had been assailing my door with a box opener and who said, "Dad, tan't you hear nuffin, it's dinner ready," whereupon I realized that another half-day had gone glimmering into the forever gone past. This, among a

million or two instances, proves to yours truly that when a knight of the tile and spatula says he will or will not do certain things he is either dippy or a prevaricator of the most abandoned type, and take it from me nobody on earth knows humanity who has not met and interviewed SOME PEOPLE WHO COME TO MY STORE.—W. H. COUSINS, Wichita Falls, Texas, in the *Practical Druggist*.

THE UNUSED FORCE OF NATIONAL ADVERTISING.

Eighty million dollars, in round numbers, are spent in this country annually in magazines and weeklies to create demand for articles having national distribution. This takes no account of other methods of advertising directed to the same end, such as posters, circulars, street-car cards, sampling, and the like.

The advertising is of a high class, prepared by men who have made a life study of the public and its tastes, and is immensely efficient in arousing consumers everywhere to a desire for the excellent products advertised. They naturally expect to be able to purchase the goods at the stores they patronize—but do retail merchants go half-way to meet that desire? Do they make known in their respective communities that they have the goods, that they have confidence in them, and that they are prepared and glad to fill orders for them? In too many cases the answer is "No."

This great and constantly stimulated demand goes frequently to waste. Supply does not meet it. Merchants as a class do not realize that an immense new trade is theirs for the asking. They do not utilize the fact that manufacturers create magnificent opportunities for local profit in preparing high quality goods, offering every facility to the trade to stock them, and advertising them broadcast among the consuming public.

There is waste—unused force—a nationwide readiness to buy which too often expends itself in mere readiness, not followed by purchase, because the merchant does not do his part.

The situation is akin to the waste and deliberate neglect of the water-power which Nature has lavished on this land and which we do not avail ourselves of.

The actual water-power available in the United States is sixty-four million horse-

power. The amount used is but five and one-third million horse-power—about 8 per cent of the whole. Coal, oil, lignite, are burned to keep going expensive boiler equipments, with their costly auxiliary gearing, while the power running down-stream unnoticed, unused, unthought-of, would abolish and replace it all.

The merchant is like a miller who stands by the side of a dam ready for his use, while he regrets the low production of his under-powered mill. The small effort required to install a turbine would bring him abounding prosperity. The merchant has but to reach out, by simple and economical methods of local advertising, and energize his whole business from the rushing and giant force of National Advertising.—RICHARD H. WALDO, Advertising Manager, *Good Housekeeping Magazine*.

SUNDAY CLOSING.

Wm. E. Lee, in a paper read before the Pennsylvania Pharmaceutical Association, discussed the subject of Sunday closing. He said:

"I am pleased to note that Sunday closing on the part of the druggists in my locality is progressing in a very satisfactory way. We have nine stores; seven of them close for a portion of the day.

"One of the greatest hindrances in Sunday closing is the fear that your neighbor will not close.

"To my mind the better way is to take the initiative and have others follow. One of my neighbors has closed his store for thirty years. In fact did so while my store was kept open. I am satisfied that only a very small part of his trade came to me while he was closed. It is, I think, a mistaken idea that the public demands an all-day service—in fact a large number of my customers have commended me for closing. It is only a custom, and the sooner we depart from it the more our services will be appreciated. It is self-evident that we cannot please every one. Every druggist realizes these facts no matter how late we keep open. Some one will step in for a postage-stamp, look in the directory, or use the telephone for an hour or so to talk to his girl, and the girl will talk to her young man.

"Sunday closing and shorter hours have been quite earnestly desired by me for a number of years, and I am satisfied that my loss

from a pecuniary point of view has been very small indeed; but I have received almost incalculable benefit from the rest in point of health. I hope that I may be spared to see the pharmacist have a reasonable number of hours of work accorded to him by the public."

Mr. Apple followed Mr. Lee with the following remarks:

"I have closed my store for three years on Sunday afternoon. I am situated in a Hebrew neighborhood, and have a Hebrew store one square south of me, and I found that it had no effect on my business in the least. I would not open my store again for the world on Sunday afternoon. Saturday is a hard day, and the following day, on Sunday, the trade is pretty heavy, but one must realize how much a few hours rest will do for a man and people will adjust themselves to the custom. Do not depend too much upon what your neighbors do."

INTOXICANTS AND TOBACCO.

We are drinking more alcoholic drinks than ever, more not only in gross, but per capita. So the Internal Revenue Bureau says after totaling up its receipts for the year ending on the 30th of last June. Here is its report of some of the products that paid taxes:

163,000,000 gallons of distilled spirits, 30,000,000 gallons more than the year before.

59,485,117 barrels of fermented liquors, an increase of 3,000,000 barrels.

7,600,000,000 cigars, 160,000,000 more than 1909.

6,830,000,000 cigarettes, an increase of 1,000,000,000.

402,000,000 pounds of plug, fine-cut, cube-cut, granulated, or sliced smoking or chewing tobacco or snuff, 4,000,000 pounds more than the year before.

141,862,282 pounds of oleomargarine, 50,000,000 pounds increase.

It appears that the consumption of spirits increased last year by over twenty per cent. Perhaps taxes were paid on more liquor than was drunk, but the payments from year to year are a pretty close measure of consumption. That drinking should increase in the face of so much prohibition and local-option legislation causes some astonishment, but is not, we believe, contrary to experience. Legislation may have an effect on manners, methods, and details of consumption, but it does not change habits. Prohibition, if Maine is any criterion, does not help at all in promoting temperance. Local option may do good, but is more likely to benefit the rising generation than the one whose habits are formed.

It is possible that in spite of the Internal Revenue figures the manner of drinking may be improved and the drinks better distributed.

It bears on this subject that of the nine millions of population in New York State seven millions live in cities. Local option in this State is confined to country townships. The increase of city population all over the country has doubtless a relation to this increase in the consumption both of alcohol and tobacco. The nervous tension of city life is greater than that of country life, calling more for stimulants, and affording more convenient opportunities to get them. Drinking and smoking, too, are both social practices, and there is more society in the cities than in the country.

The consumption of spirits has increased more in proportion than the consumption of beer, and the consumption of cigarettes more than of cigars. The report is not complimentary to legislation.—*Harper's Weekly*.

MRS. MURPHY: Oi hear yer brother-in-law, Pat Keegan, is pretty bad off.

Mrs. Casey: Sure he's good for a year yit.

Mrs. Murphy: As long as thot?

Mrs. Casey: Yes; he's had four different doctors, and each one av thim give him three months to live.—*Puck*.



* HERE'S A CHALLENGE!—The Williams Drug Co., 26th and Emerson Avenues North, Minneapolis, Minn., claims to have the heaviest trio of any drug store in the city, and the advisability is being considered of issuing a general challenge to the country at large. In our picture Mr. Williams himself stands in the center. A handsome gentleman, isn't he? The other two giants are Messrs. Tiegen and Gleason. The total weight of the three is 597 pounds, which is perilously close to 200 pounds apiece. When Mr. Tiegen went into the Williams store he lost his job in the employ of the Park Board, where his duty required him to maintain the lakes at a certain level by frequenting the bathing places.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MAKING CAPITAL OF THE PARCELS POST.

To the Editors:

Ask the average well-informed citizen his opinion of the parcels post law. He will stare at you blankly or dismiss the question with a mere "huh." But if you remind him that it goes into effect on January 1, he will be astonished.

We have had so much opposition to the parcels post, and likewise so much argument in its favor, that the public has tired of the subject and now gives it but little attention. Probably the greatest opposition came from organizations of retail merchants who saw only ruin in a reduction of postal rates.

Senator Bourne silenced this opposition, however, by his admirable adjustment of carrier charges. The entire country is divided into zones, the rates varying with the distances between these zones. Long haul rates will be reduced from 25 to 88 per cent of the present charge, depending on the distance. The local rates for shipments within a radius of 50 miles are reduced as much as 88 per cent of the previous charge.

Think what this will mean to the retail druggist! Don't suppose for a moment that it will enable the mail-order houses to gobble up all the business. Far from it. If you as a retailer are alive to your opportunity you will make capital out of the parcels post. In your circular and by newspaper announcements, impress upon your rural customers that you can now serve them better than ever before. Tell them that they can telephone in their orders or submit them by mail and have the postman deliver the goods at their doors the next morning. Let your rural customers know that there is no longer need of their coming to town to make purchases, because it will be extremely convenient to have goods delivered by parcels post.

Think what this will mean at planting and harvest time! Make it known among your customers that your local rate is five cents

for the first pound, and one cent a pound for each additional pound up to 11 pounds. Thus to deliver 11 pounds by parcels post will cost only 15 cents on your R. F. D. route. If you wish, you can well afford to pay the postage on many of the orders.

Now, then, suppose you are surrounded by R. F. D. routes which branch out from your town like spokes from the hub of a wheel. Think what a hold this gives you upon your trade! Of course the parcels post law is not yet perfected, but time and experience will bring forth any new regulations that may be necessary. Thus far the law is a step in the right direction, and there will be no retrogression. If any changes are made they will doubtless be toward lower rates.

The time draws nigh when the parcels post goes into effect. On January 1 it will be upon us. Are you going to make the most of it or let some one else take the cream of your trade? Begin your plans now. Study your locality with a view to devising ways and means of obtaining all available business. Cultivate the farmer's friendship. Educate him to use the rural free delivery as commonly as he now does the telephone.

J. C. ARTHUR ST. JAMES.

Fort Morgan, Colorado.

WRITING SHOW-CARDS WITH A "GLASEPTIC NEBULIZER."

To the Editors:

I read the article on page 331 of the August BULLETIN OF PHARMACY by Mr. Peterson on writing show-cards with a "Glaseptic Nebulizer," and proceeded to give the plan a thorough trial. But I could do nothing with it. Mr. Peterson does not tell the particular size of Winsor and Newton's artists' color that he mixes with two ounces of turpentine. They make two sizes. However, I tried it out in all proportions with the same result, namely, plenty of spots, but no shading whatever. Anybody who has ever used turpentine to thin oil or Japan colors knows that if you get an atom too much it will stain cardboard or paper. I had no faith in the scheme, but was willing to try it. I felt that if the Nebulizer would work as he said, it would certainly be just what we are all looking for.

I should like to hear from others who have tried the Nebulizer, as to what degree of suc-

cess they had. If there is anything that I did not do right in the work, I shall be pleased to be corrected.

E. A. BROCKWAY.

Rochester, N. H.

MR. PETERSON'S REPLY.

To Mr. Brockway:

Your letter addressed to the BULLETIN OF PHARMACY, stating that you were unable to get satisfactory results with the Glaseptic Nebulizer in making show-cards has been forwarded to me, with the request that I offer some suggestions that might be of assistance to you.

In the first place I must say that I cannot agree with you in your statement that "an atom too much turpentine will produce a stain," for I have sprayed mixtures varying in proportion from one tube of color to one ounce of turpentine, to one tube to eight ounces, and I never saw the slightest trace of a stain. In thinning oil or Japan with turpentine, it is the fixed oil that stains, not the turpentine.

The only difference I have observed is in the density of the shading, and it has been my experience that one *single* tube of ivory black to two ounces of turpentine gives the best result.

The spotting of your work is undoubtedly due to some of the solution getting into the straight or air tube of the Nebulizer.

Upon examining the Nebulizer you will observe that, on compressing the bulb, the air,

in passing through the straight tube, *draws* the liquid through the curved tube, meeting it at such an angle, and with sufficient force, as to break it up into a very fine spray. But if you put some fluid in the straight tube, it will be expelled with the air and in large drops.

To make sure of keeping the air tube free from fluid, it is well to use only enough fluid to half fill the receptacle. Then there is no danger of splashing any into the tube when handling the Nebulizer.

Recently I have fitted a curved metal throat-piece, such as usually comes with the ordinary oil atomizer, to the Nebulizer instead of the glass tube which comes with it, and find that it does away with the necessity of frequently draining out the fluid which collects in the horizontal pipe.

Trusting that this information will enable you to get better results, and assuring you that I will be delighted to hear further from you, I am,

ALEX. F. PETERSON.

Missoula, Mont.

THAT SULPHONAL PRESCRIPTION AGAIN:
THREE REPLIES.

To the Editors:

In the September BULLETIN, on page 389, appeared a letter on the pricing of a prescription for one drachm of sulphonal in five powders. The writer of the letter charged 45



A WESTERN ASSOCIATION.—This group picture was taken at the recent annual meeting of the Montana Pharmaceutical Association, which was held in Boulder Springs.

cents, but his predecessor had asked only 35 cents.

I do not think any set rule can be used always, but in most cases the N. A. R. D. method does nicely. One drachm of sulphonal at \$1.35 per avoirdupois ounce would cost $18\frac{1}{2}$ cents. Double the cost of the sulphonal or $2 \times 18\frac{1}{2} = 37$ cents; 37 cents plus 5 cents for container = 42 cents. Allowing three minutes for compounding at \$1.50 per hour = 8 cents. $42 \text{ cents} + 8 \text{ cents} = 50 \text{ cents}$.

I also consider the following method a good one, which in this case gives the same result. Considering the cost of doing business as 20 per cent, which I think is about the average, we assume $18\frac{1}{2}$ cents, the actual cost of the drachm of sulphonal, to equal 80 per cent of the total cost of purchasing and selling it. Thus, dividing 18.5 cents by 80, and multiplying by 100, we get 23 cents. $2 \times 23 \times 5 \text{ cents for container} = 51 \text{ cents}$. But of course we would make it even money and call it 50 cents. By both methods an advance of 100 per cent is made on the cost of the drug, which is a fair return for a prescriptionist's services.

I consider the BULLETIN a great journal and always look forward to its coming.

Portland, N. D.

A. G. AAL.

To the Editors:

We would charge 60 cents for a prescription of one drachm of sulphonal divided into five powders. We figure as follows: $60/437$ is practically $1/7$ of an avoirdupois ounce. Double the cost of the sulphonal and you get \$2.70, which, divided by 7, gives 39 cents approximately. Add 20 cents for the time and knowledge required to prepare the powders properly and you get 59 cents. So we charge 60 cents in round numbers.

Some druggists do not make the proper allowance for the difference between avoirdupois and troy ounces when doubling the cost. In filling prescriptions, I charge \$1.50 an hour for my time.

FRANCIS J. E. MOULEY.

Great Bend, Kansas.

To the Editors:

I want to say that Frank Fridgen can't be in business to make money when he puts up a drachm of sulphonal in five powders for 25 cents. See page 432 of the October BULLETIN. You know it costs him about 20 cents per drachm. I am calculating 7 drachms to

the ounce, which is about right, I think. Forty cents is what I should charge.

Little Rock, Ark.

S. D. KNOX.

ALL TRYING TO SAVE THE COUNTRY!

To the Editors:

In accordance with your earnest request I am sending you my portrait under separate cover to-day. [This was reproduced in the October issue of the BULLETIN OF PHARMACY—Ed.] Our political campaign is warming up nicely, and we are beginning to get into the fray in earnest. You understand, of course, that I am up for reelection to the House of Representatives of the General Assembly of the State of Iowa. We have a third party ticket in the State this year, but it does not involve the legislature, as both Progressive and Regular Republicans agree that Senator Kenyon should be returned and that he must be reelected at our next session.

All varieties of political belief are now on tap in Iowa, from Regular Republicans and Democrats to the Bull Moose People, Socialists, Prohibitionists, and Anarchists—all anxious to save the country. Politics in Iowa this year are like what Bill Nye said of New England weather—all kinds at the same time! Thank the Lord, however, we had a good corn crop, and the hogs haven't got the cholera yet!

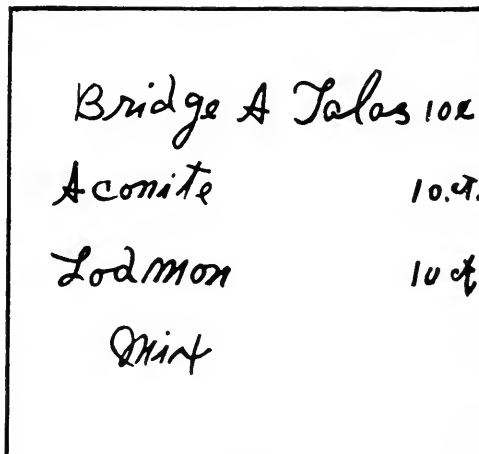
Eldon, Iowa.

FRANK SHANE.

PHONETIC SPELLING.

To the Editors:

How is this for a prize-winner? For the first item we dispensed tincture of digitalis.



and it seemed to be what was wanted. The patient was a horse.

L. R. SMITH.

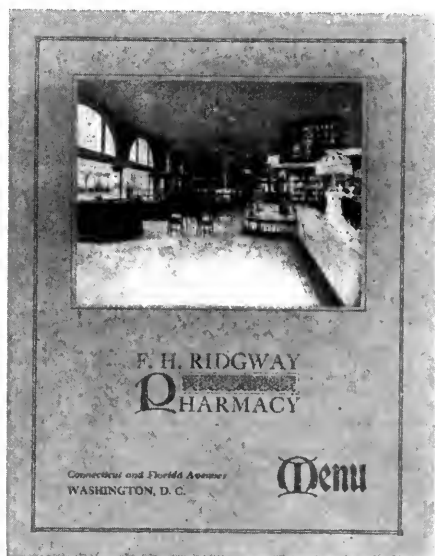
Cherokee, Okla.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

An Artistic Menu Card.—

F. H. Ridgway has one of the finest drug stores in the city of Washington, D. C. The location is at the



corner of Connecticut and Florida Avenues, right in the heart of the diplomatic and aristocratic district. One of the marked features of Mr. Ridgway's store is his soda department. The fountain is one of great beauty

SODAS									
Choclate	Orange	Peach	Strawberry	Raspberry	Vanilla	Peppermint	Cherry		
Coffee	Lemon								
All for One Price 15c									
SUNDAYS									
Choclate	10c	Orange	10c	Raspberry	10c				
Peach	10c	Lemon	10c	Strawberry	10c				
Vanilla	10c	Cherry	10c						
Peppermint	10c	Hot Milk	10c						
SPECIALS									
Choclate	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
PLAIN DRINKS									
Coke	10c	Cherry	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Lemon	10c	Orange	10c	Peppermint	10c				
Peppermint	10c	Orange	10c	Peppermint	10c				
Hot Milk	10c	Orange	10c	Peppermint	10c				
FANCY DRINKS									
Choclate	10c	Orange	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
EGG DRINKS									
Choclate	10c	Orange	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
GINGER ALE									
Choclate	10c	Orange	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
MINERAL WATERS									
Choclate	10c	Orange	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				
HOT SODA									
Choclate	10c	Orange	10c	Peppermint	10c				
Cherry	10c	Orange	10c	Peppermint	10c				
Choclate	10c	Orange	10c	Peppermint	10c				

and is liberally patronized. Recently Mr. Ridgway got out a menu card which seems to us uncommonly artistic. In the accompanying engravings we are striving to show both the front and back of the card, although the half-tones entirely fail to do the menu adequate justice.

We may add as a matter of possible interest that the Ridgway Pharmacy requires the constant services of eighteen people, so that it may be seen that Mr. Ridgway enjoys a very nice business.

It's Pretty Good, Whosoever It Is!—

The window display of perfumery shown in the accompanying illustration came into the BULLETIN office some months ago. We regret to say, however, that the name of the sender became lost somewhere in the shuffle. We had a half-tone made, and then began a



systematic search for a letter which might possibly have accompanied the picture in the first place. Nothing could be found. Anyway the window display is pretty good, and we are publishing it finally for the benefit of our readers in general. If anybody wants to acknowledge authorship, we shall be glad to hear from him and to give him proper credit in a subsequent issue of the journal. We are anxious to "render unto Cæsar the things that are Cæsar's."

Mr. Bodemann's Pungent Paper.—

"Don't be afraid of your shadow," was the caption of an interesting paper by Wilhelm Bodemann before the Commercial Section of the A. Ph. A. at the Denver meeting in August. "This fear of maintaining good prices is a false habit. For years I sold a certain talcum powder at 25 cents. In our neighborhood we had agreed on this price. Finally I learned some were cutting the price, so I let it go at 15 cents.

"Now, harken! Did that increase the sales? Not by any means. It rather scared the people. They feared the quality had been lowered.

"For years we peddled almanacs, tolerated the patent medicine evil, gave telephone service free. We were afraid of our shadows. But we picked ourselves up and found that our patrons thought more of us. Let the druggist of America act as a man with backbone and he will be treated as such. People do not admire molly-coddles!

"Make up your minds on what you consider the right course, and then go to it! Hit the line hard! Everything else has gone up—help, meat, groceries, clothes, and it makes one disgusted to see our people act so cowardly as to be afraid to keep pace with the times. We have to pay laborers twice as much as we used to. We should be better compensated, but are not because—well, because, as I started out to say, we are afraid of our shadow!"

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Telepathic Tablets.—

German chemists find that yeast will assimilate small quantities of alcohol, and the growth is stimulated thereby.

F. Dossin says that therapeutically sodium nitrite is more useful than nitroglycerin because it is less toxic and its action less fugitive.

For the internal administration of radium emanations, drinking water is found to produce more lasting effects than breathing the emanations.

A French patent has been granted for the production of diamonds by exposing carbon to ultraviolet light at a suitable temperature.

German chemists think that microorganisms, perhaps bacteria, played an important part in the formation of clay.

For silver-coating, a mixture of equal parts of silver chloride, cream of tartar, sodium chloride, and alum is rubbed on to a metallic surface with a little water. The silver is reduced and adheres.

For gold-coating, 3.5 grammes of gold is dissolved

in nitrohydrochloric acid, 1 gramme potassium nitrate and 3.5 grammes ammonium chloride added, and the whole is evaporated to half its volume. Then 200 Cc. of water are added, the linen rags dipped into the solution and then dried. The rags are then saturated with alcohol and burned, and the ashes used for the plating-polish.

Experiments on the souring of milk by several chemists point to the idea that the organisms which cause the souring are not normally constituents of the milk, but are probably derived from the intestinal tract.

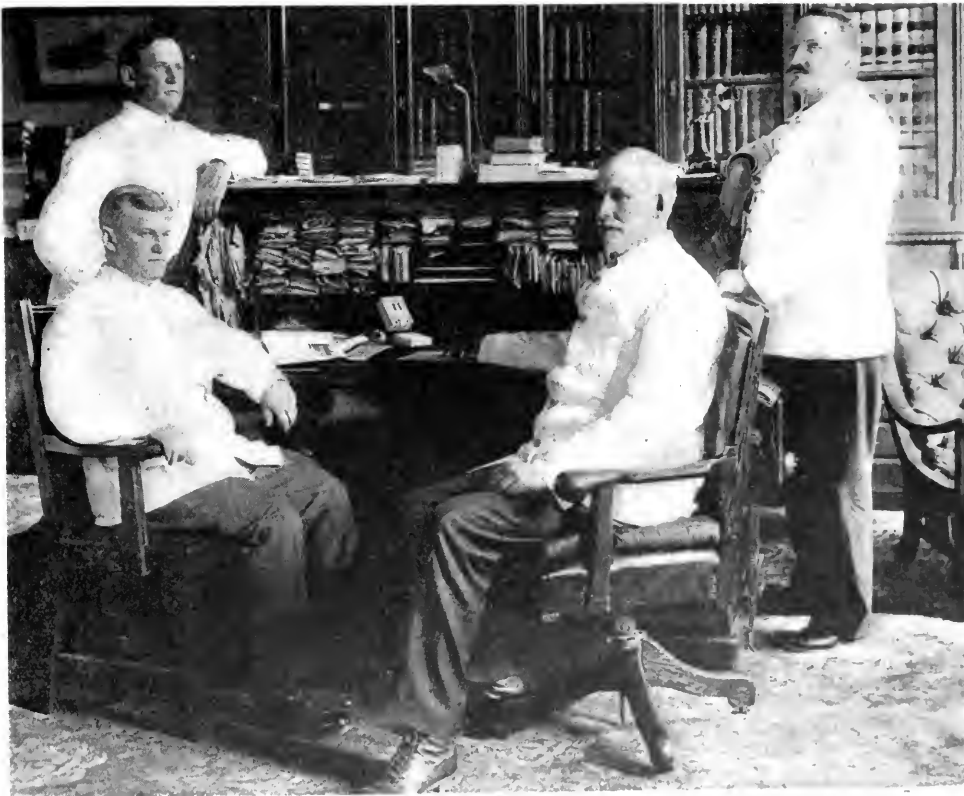
W. Volz proposes that horses be fed on yeast residues in place of a portion of their grain. He claims good nutritive value, no ill effects, and a considerable saving in cost. A frisky idea, surely!

The manufacture of kelp products is likely to be revived on the coasts of Ireland and Scotland. Improved methods make the combined products—ammonia, acetic acid, iodides, potassium, and charcoal—profitable.

Plants now in operation or being built for the utilization of atmospheric nitrogen have a capacity of over 250,000 tons of calcium cyanamide per year, and will probably be doubled within five years.

A factory is being erected in Holland for the manufacture of artificial rubber from fresh sea fish. It is calculated that fish-rubber can be made at a cost about one-sixth that of real rubber.

The Australian government has purchased the pitch-



THEY HOBNOB WITH CONVICTS!—These distinguished looking gentlemen represent the medical staff of Clinton prison in Dannemora, N. Y. The chief, Dr. Julius B. Ransom, sits in the chair at the right. Dr. Walter N. Thayer, the assistant physician, stands at the left. Seated opposite Dr. Ransom is Robert A. Sloss, pharmacist of the institution, and a graduate of the Albany College of Pharmacy, class of 1894. The rotund figure at the right belongs to J. B. Severance, the head nurse. Clinton prison, located up in the Adirondack region, is famous for its tuberculosis hospital. All the convicts in New York State affected with tuberculosis are transferred to this one prison, and the work done there in this direction has brought the institution to the favorable notice of physicians all over the country.

blende mines at Joachimsthal for about \$470,000. It is estimated that 45 grains of radium per year can be extracted from the mines.

Dr. Umney says that volatile oils dissolve from 0.17 per cent (sandalwood oil) to 1.13 per cent (geranium oil) of their weight of water. Most oils will hold approximately 0.5 per cent, except those which are rich in terpenes, which do not take up water to an appreciable extent.

Extract of Gentian.—

Mr. Bridel found that in extracting gentian root with water he obtained 46 per cent of extractive, but only 15 per cent of the amount of gentiopicrocin that was in the root. When 60 per cent alcohol was used on the same root, he obtained 52.5 per cent of extractive, containing 85 per cent of the total amount of gentiopicrocin contained in the drug. He found that the alcoholic extract not only was richer, but contained more of the sugars of the natural drug than did the aqueous extract. He considers the alcoholic extract much more desirable.

Nature's Legacies.—

E. Ramann finds that as leaves wither before dropping in the fall, a considerable portion of the protein returns to the trunk of the tree, and also most of the potash and phosphates. The return takes place in a short time, and serves to nourish and strengthen the trunk. When leaves are killed by frost, the salts return to the trunk, but the protein does not, hence a frost when the leaves are green means a considerable loss to the tree.

What is a Poison?—

Experiments upon plants have shown that substances which act as poisons to the plants will in very small doses stimulate their growth. This is held to corroborate the law that materials which are poisonous to life in large doses act as stimulants in small doses.

BOOKS

OUTLINES OF BOTANY, MICROSCOPY AND PHARMACOGNOSY.

Dr. Henry Kraemer, of the Philadelphia College of Pharmacy, has published an outline of his courses in botany and pharmacognosy. The first year's work is devoted to botany. Leaves and roots, fruit and seed are studied morphologically.

The second year is given over to the pharmacognosy of the pharmacopœial drugs. Dr. Kraemer aims to acquaint the student with the physical characteristics of drugs to aid in their identification. The third year's work is devoted to the pharmacognosy of important unofficial drugs and those of the National Formulary.

This is something of a departure from the usual plan in pharmacy schools where official and non-official drugs are studied together. But the author states that any instructor who wishes may consider non-official drugs along with those outlined in the second year. His own purpose for separating the two is to concentrate attention on the drugs of the U. S. Pharmacopœia because of their greater importance.

This little work should prove useful in other colleges. Our readers may be interested to know that it contains review and examination questions covering nearly the entire subjects of botany and pharmacognosy. Dr. Kraemer's "Outlines" are printed by J. B. Lippincott Company, of Philadelphia.

SIMON AND BASE'S MANUAL OF CHEMISTRY.

The tenth edition of this valuable work is now off the press. The new revision makes its appearance at an opportune time. Students are about to begin their academic year, and physicians, pharmacists, and chemists are preparing for their winter's work. The Manual still preserves the characteristics which have won for it its present popularity.

Starting with several paragraphs on elementary chemistry, the authors proceed to a discussion of qualitative analyses for the detection of different metals and acid radicals. Methods for quantitative determination are also given. The last three hundred pages are devoted to a consideration of organic chemistry. Here the carbon compounds and their halogen derivatives are described. The section on physiological chemistry has been rewritten and brought in line with present-day knowledge and theories. Special care has been taken to introduce into the new edition the most modern methods for chemical examination and clinical diagnosis.

To physicians and pharmacists we can recommend Simon and Base's Manual of Chemistry as a useful and valuable work. There are 774 pages with 82 engravings and 9 colored plates. The publishers are Lea & Febiger of Philadelphia and New York. The price is \$3.00, net, in cloth.

A CRITICAL REVISION OF THE GENUS EUCALYPTUS.

This is by J. H. Maiden, F.L.S., Government Botanist of New South Wales. Parts XIII, XIV, and XV, at two shillings and sixpence each, are at hand. The fifteenth part of this work has now been published. The first part appeared in 1903 and dealt with *Eucalyptus pilularis*; the subsequent numbers, including the numbers here considered, have brought the number of species treated up to 75, ending with *E. falcata*, sixteen being described in the last three numbers and illustrated with 12 plates. One new species, *E. Gillii*, is described from the dry sections of the southern parts of Australia. The painstaking care and exhaustive treatment of the subject reflect great credit upon the author, and set a standard for research work to which monographers in general may well give careful consideration.

THE SPATULA INK FORMULARY.

A rather unusual book is "The Spatula Ink Formulary," composed of recipes and directions for making writing fluid of all kinds. The author is Dr. J. H. Oyster. He prefaces the work with the statement that he has been collecting ink formulas for thirty-five years with a view to publishing them in book form. Practically all known recipes for inks can be found in this volume. It is published by the Spatula Publishing Company of Boston. There are 172 pages bound in cloth. The price is \$2.00 post-paid.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

A Difficulty Over Menthol.

A. L. G. asks: "How would you compound the following prescription so that the menthol will stay in solution?"

Listerine	1 drachm.
Glycerin	1 drachm.
Carbolic acid	4 minims.
Menthol .....	.5 grains.
Cocaine muriate.....	20 grains.
Aqua, q. s., ad.....	2 ounces.

"The doctor who writes this prescription says that a certain druggist puts it up so that there is no precipitate. But every method that I have used results in a precipitate on standing."

The menthol is insoluble in the mixture. Call the physician's attention to that fact.

There are three ways of overcoming the difficulty, viz.: Add a sufficient quantity of alcohol to dissolve the menthol; reduce the amount of menthol; or filter off the excess. Most likely the customer's competitor used the latter method. We should suggest the following method for compounding if the physician will not consent to adding a sufficient quantity of alcohol to retain the menthol in solution: Triturate the menthol and phenol until liquefied. Add 30 grains of purified talc and triturate well. Add gradually the listerine, glycerin, and 14 drachms of distilled water in which the cocaine muriate has previously been dissolved. Filter through paper. A bright, clear solution will result.

Why the Mucilage Won't Come Off.

E. O. S.—On page 396 in this department of the September BULLETIN a querist expressed his inability to remove mucilage from a plate-glass window. He had tried every kind of solvent, but the adhesive simply would not come off.

Fred P. Shanafelt, of Canton, Ohio, now comes forth with an ingenious explanation: That the mucilage was composed of sodium silicate, which solidified and is now part of the glass itself. If this be true, the mucilage is certainly there to stay!

If glue has simply dried upon the glass, hot water ought to remove it. If, however, the spots are due to "size" (the gelatinous wash used by painters) they become very refractory when dried, and recourse must be had to chemical means for their removal. The commonest "size" being a soluble gelatin, alum, and resin, dissolved in a solution of soda and combined

with starch, hot solutions of caustic soda or potash may be used. If that fails to remove them, try diluted hydrochloric, sulphuric, or any of the stronger acids. If the spots still remain some abrasive powder (flour of emery) must be used and the glass repolished with jewelers' rouge applied by means of a chamois skin. Owing to the varied nature of "sizes" used the foregoing methods are offered merely as suggestions.

Heroin and Terpin Hydrate Preparations.

J. L. B. wants a working formula for elixir of heroin and terpin hydrate, elixir of heroin, and syrup of codeine compound.

Elixir of heroin and terpin hydrate will be found on page 43 of the National Formulary. It is made as follows:

Heroin	11 grains.
Elixir of terpin hydrate.....	32 fluidounces.

Dissolve the heroin in the elixir.

4 Cc. (1 teaspoonful) contains 0.065 gramme (1 grain) of terpin hydrate, and 0.0027 gramme (1/24 grain) of heroin.

The formula for elixir of terpin hydrate used in the foregoing mixture appears on page 42 of the National Formulary:

Codeine	32 grains.
Elixir of terpin hydrate (N. F.).....	32 fluidounces.

Dissolve the codeine in the elixir, by trituration.

4 Cc. (1 teaspoonful) contains 0.065 gramme (1 grain) of terpin hydrate and 0.0084 gramme (1/8 grain) of codeine.

To prepare an elixir of heroin add one grain of heroin to each ounce of aromatic elixir, U. S. P.

Syrup of codeine compound may be made by dissolving 1/6 grain of codeine phosphate; 3/4 grain of terpin hydrate; 1/2 grain of eucalyptus extract, and 3/4 grain of ipecac to the drachm, in a vehicle containing a little sugar.

Keeping Drugs Free from Insects.

J. K. writes: "Will be glad to have you reply to the following inquiry: How can I keep insects from getting into my stock powder? It contains nux vomica, bloodroot, fenugreek, saltpeter, sulphur, and cottonseed meal."

If you will consult our book "350 Dollar Ideas for Druggists," you will find a method of protecting drugs from insects. It appears on page 22 and was contributed by Murphy Williams of Corsicana, Texas. To quote:

"I have been worried for years trying to keep insects out of certain drugs. Some months ago I tried the following scheme with good results: Once a month, regularly, pour a few drops of chloroform into each container of crude drugs. This procedure is inexpensive and kills the insects without injuring the goods. Among the herbs which receive this treatment are capsicum, black pepper, mustard, powdered sage, flaxseed, ground flaxseed, quince seed, celery seed, coriander seed, powdered ginger, powdered nux vomica, aniseed, caraway seed, powdered orris, powdered rhubarb, rhubarb fingers, and fenugreek. I always make a note on my calendar, and do the chloroforming regularly on the 15th of each month. Thus I am sure of never forgetting it."

Hectograph Pads.

F. N.—A hectograph is essentially a mixture of glue (gelatin) and glycerin. It may be made by melting together 1 part of glue, 2 parts of water, and 4 parts of glycerin (all by weight, of course), evaporating some of the water and tempering the mixture with more glue or glycerin if the season or climate require. The mass when of proper consistency, which can be ascertained by cooling a small portion, is poured into a shallow pan and allowed to set. Clean glue must be used or the mixture strained; and air bubbles should be removed by skimming the surface with a piece of cardboard or similar appliance.

Variations of this formula have been proposed, some of which are:

- | | | |
|-----|-----------------------|-------------|
| (1) | Glycerin | 12 ounces. |
| | Gelatin | 2 ounces. |
| | Water | 7½ ounces. |
| | Sugar | 2 ounces. |
| (2) | Water | 10 ounces. |
| | Dextrin | 1½ ounces. |
| | Sugar | 2 ounces. |
| | Gelatin | 15 ounces. |
| | Glycerin | 15 ounces. |
| | Zinc oxide | 1½ ounces. |
| (3) | Gelatin | 10 ounces. |
| | Water | 40 ounces. |
| | Glycerin | 120 ounces. |
| | Barium sulphate | 8 ounces. |

Compound Tincture of Vanillin.

W. R. W. writes: "Will you please publish a formula for a flavoring agent made from vanillin and cumarin for bakers' use, to have about the same flavoring capacity as vanilla extract?"

Try compound tincture of vanillin. It appears on page 187 of the National Formulary:

Vanillin	90 grains.
Cumarin	6 grains.
Alcohol	6 fluidounces.
Glycerin	4 fluidounces.
Syrup (U. S. P.)	4 fluidounces.
Compound tincture of cudbear (N.F.)	½ fluidounce.
Water, a sufficient quantity to make	32 fluidounces.

Dissolve the vanillin and cumarin in the alcohol, add the glycerin, syrup, and compound tincture of cudbear, and lastly enough water to make 1000 Cc. or 32 fluidounces.

Cider Preservatives.

C. F. S.—You had better look carefully into the pure food and drug laws before selling preserved cider. For your personal use, we offer the following formulas borrowed from the literature:

1. The addition of 154 grains of bismuth subnitrate to 22 gallons of cider prevents, or materially retards, the hardening of the beverage on exposure to air; moreover, the bismuth salt renders alcoholic fermentation more complete.

2. Calcium sulphite (sulphite of lime) is largely used to prevent fermentation in cider. About ⅓ to ¾ of an ounce of the sulphite is required for 1 gallon of cider. It should first be dissolved in a small quantity of cider, then added to the bulk, and the whole agitated until thoroughly mixed. The barrel should then be bunged and allowed to stand for several days, until the action of the sulphite is exerted. It will preserve the

sweetness of cider perfectly, but care should be taken not to add too much, as that would impart a slight sulphurous taste.

Liniment.

Detroit writes: "Kindly publish a formula for a liniment containing safrol, oil of tar, oil of mustard, light oil of pine, oil of wintergreen, chloroform (commercial), and capsicum. What would you use as a base and in what proportion would you use it? Please state the percentage of chloroform and the base if it be of an alcoholic nature."

We suggest the following formula:

Oleoresin of capsicum	2 Cc.
Oil of sassafras, artificial	6 Cc.
Oil of tar	12 Cc.
Oil of mustard	1 Cc.
Oil of pine needles (<i>Abies Siberica</i>) or oil of turpentine	15 Cc.
Methyl salicylate	20 Cc.
Chloroform, commercial	24 Cc.
Petrolatum liquidum or alcohol	q. s. ad 120 Cc.

This contains chloroform 20 per cent, and, if alcoholic, 33⅓ per cent, of 95-per-cent alcohol.

Ice Plant.

D. C. A. writes: "Can you tell me anything as to the physiological action of ice plant (*Monotrobia Uniflora*)? The common names are ice plant and Indian pipe plant. Do you know whether or not it is habit-forming, like opium?"

The principal constituent of this drug is andromedotoxin, a poisonous alkaloid, although the plant is not classed as a poisonous one. It is not at all likely that the plant is habit-forming. It is a stimulant tonic, diuretic, and nervine. It has been used in epilepsy, nervous irritability, and similar ailments as a nerve sedative, and in this respect may be similar to opium.

To Remove Iron Stains.

J. E. T. writes: "Can you tell me the formula of a light, creamy paste that will remove iron rust from cotton and linen goods? I know that the oxalates and tin chloride are good. How can they be made into a paste that may be put into collapsible tubes?"

Suppose you use cream of tartar and oxalic acid. Make them into a paste with glycerin and a little water. Be careful about using the mixture on colored goods, because there is danger of removing the dye.

A Germicide.

C. P. H. & S.—We do not know the composition of the proprietary germicide which you mention. Perhaps liquor antigerminarius N. F. will serve your purpose. The formula reads:

Thymol	240 grains.
Oil of eucalyptus	2 fluidounces.
Oil of lavender	2 fluidounces.
Alcohol	25½ fluidounces.
Water, enough to make	32 fluidounces.

Dissolve the thymol and oils in the alcohol, add enough water to make 32 fluidounces, and filter if necessary.

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THE MONTH'S HISTORY

Every indication points to a rising tide of prosperity, and there is no reason on earth why the drug trade shouldn't get its share. The crops this year are astonishingly good. The corn crop was larger than it had been for six or seven years; the hay crop was considerably better than the ten-year average; the oat crop exceeded all precedent; and the good cotton crop leaves nothing to be desired. Turning to the steel and iron industry, which is always an excellent barometer, we find the United States Steel Corporation reporting unfilled orders larger in amount than for five years past. Meanwhile the increase in railroad traffic is so tremendous that the problem presented by a shortage of cars is becoming most urgent.

Everywhere business men are exhibiting

greater confidence than they have for some years. With almost entire accord, the country is looking forward to an era of expansion and development. This is all the more astonishing during such a presidential campaign as we have just witnessed, and in the face of direful prophesies of what might happen if this party or that were chosen to conduct the affairs of government. "Big business," in accordance with its shrewd practice, had discounted the results of the election, and had foreseen Mr. Wilson's triumph. If, realizing the inevitable, it continued to foster growth and confidence, it must have had no fear of any "Democratic panic." Since the election everything seems to point as before to continued expansion, and even Mr. Wilson's announcement of the revision of the tariff downward at a special session of Congress next spring has caused no let-up in the onward movement.

Let us therefore all get ready for prosperity—and let us profit by it like good business men. All this talk about a panic is childish—that is, it is childish except that if we talk long enough about a thing, and fear it enough, and continue systematically to expect it, we shall most assuredly bring it to pass.

* * *

ARRESTED FOR SELLING ABORTIFACIENTS.

The sensation of last month was the simultaneous arrest in different cities throughout the country of 173 persons for misuse of the mails either in soliciting criminal medical practice, or of disposing of drugs and instruments intended for criminal purposes. The newspapers have been full of it, and our readers are doubtless well informed of the situation. It may be said, however, that the arrests were made under Section 211 of the United States Penal Code, which bars from the mails any advertisement, letter or circular proposing or suggesting criminal practices, or any package containing any drug, instrument or substance to be used for immoral or unlawful purposes.

Presumably the offense involved in most of

the 173 cases was that of sending abortifacients through the mails or of soliciting orders for them. Among the defendants are retail and wholesale druggists, physicians, and other persons who stand so well in their communities as in some instances to be church elders and Sunday-school superintendents. It is a very pretty mess from beginning to end, and some heavy penalties will doubtless be imposed.

The situation is confessedly unfortunate, but it will serve the useful purpose of teaching every druggist and every doctor that the mails may not be used for the solicitation of such business, or for the distribution of such remedies. Furthermore, practically every State absolutely forbids the sale and use of abortifacients as such. More than that, nearly every State pharmacy act or poison law prohibits the sale of well-known emmenagogues like ergot, cottonroot, oil of tansy and oil of pennyroyal unless they are plainly labeled "poison," unless the sales are registered, and unless it is known by the druggist that the substances are to be used for legitimate purposes and not to produce abortion.

* * *

THE REFERENDUM IN CALIFORNIA.

These are the days of the referendum in politics. "Give the people a voice" is one of the shibboleths of recent years. In pharmaceutical circles, as we pointed out two or three months ago, the graduation prerequisite idea has been submitted to the vote of the pharmacists of several States during the last two or three years. We now find that the California State Pharmaceutical Association has gone a step farther, and has put it up to its entire membership to decide by mail on the pros and cons of a considerable number of proposed amendments to the pharmacy laws of the State.

It would seem that the members of the association have been more or less at loggerheads for several years over the wisdom of making certain amendments. Two or more factions have meanwhile developed, and a good deal of bitterness has resulted. It was a very happy stroke when, at the last annual meeting of the association, it was decided to submit the whole question in detail to the entire membership by mail, and then to abide by the results. Accordingly a voting sheet has been sent out

on which 12 questions are printed, and druggists are asked to vote yes or no on every proposition. These questions cover such topics as the graduation prerequisite, the enforcement of the pure drugs law by the State Board of Health, the amendment of the poison law, whether the Board of Pharmacy shall comprise five or seven members, etc., etc.

* * *

WHY NOT TRY IT ELSEWHERE?

This whole plan strikes us as being admirable, if only the results are honestly and faithfully abided by. There ought to be no looking behind the returns. Inasmuch as the whole thing is put up to a popular vote, the results of this popular vote should be considered mandatory instructions, and all factional fighting should be abandoned. It might not be a bad idea to try out this referendum scheme in States like Pennsylvania. There, as our readers know, strong differences of opinion have developed during the last few years over proposed amendments to the poison and anti-narcotic laws. Finally, after a good deal of debate, these differences were apparently ironed out by definite vote at the last annual meeting of the State association.

But what do we find? Is there harmony as a result of the vote, and has the minority decided to abide by the results? No! We have been hearing of dissatisfaction ever since from different individuals and different groups in the State. The Philadelphia Association of Retail Druggists, for instance, either has held a meeting or soon will hold one, to protest formally against the decisions reached by the State association, and to outline what sort of amendments it will stand for. Presumably it will send representatives to the State legislature to appear against the representatives sent by the State association. Now why wouldn't it be a good scheme to do in Pennsylvania what is being done in California—submit the whole thing to a State-wide vote, find out what druggists want, and then go ahead and get it?

The majority ought to rule in this country. This is one of the fundamental rules of our system of government. The difficulty is that it is often impossible to know where the majority stands, and the referendum idea furnishes a pretty good method of getting at the facts. It has been used, as we have already reported, with a good deal of success in dis-

covering what the sentiment is about the graduation prerequisite. Why not go farther with it?

* * *

ANTI-NARCOTIC REFORM.

There has fortunately been a good deal of activity lately in the direction of anti-narcotic reform. In Alabama the Board of Pharmacy has begun an active campaign against violators of the State law. The license of one pharmacist has been revoked; six or seven other druggists are under investigation; and it is expected to keep the work up systematically. The board is endeavoring to induce State officials to create a fund for the purpose.

In Brooklyn a grand jury has begun an investigation. In one week about 17 witnesses from wholesale drug firms were examined, the idea being to find out who were the large purchasers of narcotics in Brooklyn. The District Attorney has followed up the leads energetically. One offender has been sentenced to five years' imprisonment on the second offense for the attempted sale of cocaine. A second man, who is a druggist by the way, is being held in \$3500 bail on two charges, and his brother, a dentist, in \$2000 bail on one charge. Other early arrests are probable.

The District Attorney of Kings county has characterized the spread of the drug habit as one of the worst evils Brooklyn has ever had to contend with, and he has declared that the work of investigation and prosecution would be continued until every illicit trafficker had been driven to cover.

* * *

DRUG-STORE COMBINATIONS.

Drug-store combinations seem to be growing apace. The group of Liggett stores throughout the country owned by the Louis K. Liggett Co. will henceforth be known under the title of "Liggett's." These stores, as everybody knows, are a sort of offshoot of the United Drug Co., manufacturers of Rexall preparations. They now total 51 in number, and plans are under way for the opening of five additional stores in Greater Boston. At the present time the Liggett establishments are located in Boston, Buffalo, Baltimore, Brockton, Columbus, Detroit, Haverhill, Lawrence, Lowell, New York, Newport, Paterson, Pawtucket, Providence, Salem, Syracuse, Toronto, Troy, Woonsocket, and Worcester.

On a recent occasion all 51 of the Liggett stores printed large advertisements in the local newspapers, offering bargains in every department. In the New York store, at the corner of Broadway and 34th Street, the total business of the day was said to have exceeded \$10,000, while the total of all the 51 stores in the group was 60 per cent greater than any previous day's business had been in the history of the company.

Now we find that Baltimore has a new drug-store combination. It is being promoted by M. M. Whitehurst, John W. Gregory and H. Hechheimer. The business will be known as the Associated Drug Stores. It has recently been incorporated under the laws of New Jersey and has a capital stock of \$45,000. So far the company has three stores, and it has declared its intention of acquiring other stands in Baltimore, and also of developing a chain of stores in Richmond, Va., Norfolk, Va., and other near-by towns. S. A. Nattans, a son of the late Arthur Nattans, head of the Read Drug and Chemical Co. at the time of his death, is general manager of the corporation.

* * *

Miss Florence Yaple, who **FLORENCE YAPLE.** died some weeks ago, was probably not very well known to the pharmacists of the country, but this was largely because of her excessive modesty. For years she more or less regularly attended the annual meetings of the American Pharmaceutical Association to report the conventions for the *American Journal of Pharmacy*. Those of us who represented the pharmaceutical press got to know and to admire her, but doubtless the general membership was less fortunate. Graduating from the Philadelphia College of Pharmacy in 1895, she subsequently served as research assistant to Professor Trimble, and afterwards to Professor Kraemer. She likewise helped both men in the editorial and business conduct of the *American Journal of Pharmacy*. Working much of the time in the *Journal* office in the college building, she was frequently consulted by students for information of one kind and another, and she was always willing to be of service. She was a fine scholar, in pharmacy as well as out of it, was a faithful and earnest worker, and will be sincerely missed by those with whom she came intimately in contact.

**PERMANENT HOME
FOR THE A. PH. A.?**

James H. Beal, that quiet, serene, constructive thinker, has started the development of a new idea. In an editorial in the November issue of the *Journal of the A. Ph. A.* he argues very convincingly that the Association ought to have a permanent home. It should have a place for the preservation of its archives and its growing historical collection; it should have room to accumulate a library instead of continuing to dissipate it for lack of space; "it should have at its command suitable laboratories where the formulas proposed for inclusion in the N. F. could be tested out;" and it should have a definite headquarters where its editorial and clerical staff could be housed, and where its business could be transacted. Dr. Beal says that such a building, at a rough guess, could be erected for \$50,000. It could easily be maintained from the rapidly increasing revenues of the Association, but the first cost would have to be met otherwise, "and since the A. Ph. A. has given its services freely to the whole of American pharmacy, why should not the whole of American pharmacy contribute to a plant which would enable the Association to greatly increase its usefulness to the cause which it represents?"

* * *

**THE
PARCELS POST.**

It isn't perfectly clear that the parcels post is going to mean such a great reduction after all—as compared, we mean, with express rates. We find in a recent issue of the *Western Druggist* an interesting comparison originally compiled by the Chicago Association of Commerce. The proposed reduction in express rates will of course make quite a difference, and when the new rates are compared with the parcels post figures it is discovered that the latter has the best of it only for short distances, and for packages less than four pounds in weight. When you get up above four pounds, and particularly when you send a package a considerable distance, it is cheaper to use the express company. On a short haul, within the 50-mile zone, for instance, the parcels post is cheaper until you reach the weight of seven pounds: on a longer haul, such as 600 miles, the parcels post is cheaper only up to four pounds; and when the distance of 1000 miles is reached, the parcels post ceases

to be cheaper at a limit of three pounds. Beyond these limits the express companies, under the proposed rates, will have much the best of it.

* * *

**WORTH
DUPLICATION.**

A feature was inaugurated at the last annual meeting of the Iowa State Pharmaceutical Association which is well worthy of duplication elsewhere. It was called an educational session, if we remember correctly, but while it certainly was educational, it was not that in the customary meaning of the word. It was a session where every druggist who had made a pronounced success of some particular department in his store was asked to tell how he had turned the trick, and his remarks were then discussed. As a result, brief five- and ten-minute talks were given by prominent druggists from different parts of the State, and the whole idea turned out to be such a success that it will be made the leading feature of the convention next year.

* * *

Dr. George D. Rosengarten, vice-president of the Powers-Weightman-Rosengarten Co., has been seriously ill with typhoid fever in the German Hospital at San Francisco, but is now reported as well or nearly well. He traveled West with a hundred or more members of the International Congress of Applied Chemistry, on a tour of investigation following the New York meeting last October, and apparently was taken ill while on that trip.

* * *

The Executive Committee of the Illinois Pharmaceutical Association, at its midwinter meeting held last month in Chicago, adopted a resolution asking the trustees of the University of Illinois to include in their legislative requests this year the sum of \$200,000 for the purchase of a site and the erection and equipment of a building for the School of Pharmacy.

* * *

The city of Columbus, which has for some time enjoyed the distinction of being one of the best price-protected cities of any size in the entire country, now threatens to indulge in a fierce saturnalia of cut rates. The moon looks angry.

EDITORIAL

SHOULD THE DRUGGIST MAKE HIS OWN GALENICALS?

The question propounded in the caption of this editorial was discussed in very animated fashion at the Denver meeting of the American Pharmaceutical Association last August. F. W. Nitardy, who has been and perhaps now is connected with the food and drug authorities in Colorado, argued very strenuously that the druggist should be his own manufacturer. He gave figures showing the difference between the cost of galenicals when manufactured by the druggist on the one hand, and when purchased by him on the other. The saving was represented to be quite considerable, and after Mr. Nitardy had finished his demonstration he was earnestly supported by Dr. W. C. Anderson. Others, too, discussed the question.

Now witness a strange development: a teacher of pharmacy immediately took the other side of the question! Prof. H. C. Washburn, dean of the Denver College of Pharmacy, held that for more reasons than one it was uneconomic and contrary to his own best interests for the druggist to make many of his tinctures, fluidextracts, elixirs, and the like. His position was that a large manufacturer, well provided with the latest and best equipment, and having at his command the service of experts in every line, could secure better crude drugs, could make preparations of more uniform potency, could assay and standardize them with greater skill and accuracy, and, everything considered, could sell his products to the druggist at a lower figure than the druggist could make them for himself. It was to be gathered from his remarks that he believed manufacturing pharmacy to be one of the marked developments of the time, and that to reject it was to turn one's back on progress, advancement, and economic advantage.

As for ourselves we have no desire to argue very positively on one side or the other of this proposition. Practically all of the pharmaceutical schools and colleges urge their students very earnestly to make their own galenicals. Some of the pharmacists of the older school—"apothecaries," as they used to be called—give the same counsel. Perhaps they are right. In

any event the individual pharmacist will follow his own inclination and training, and if he likes the work of manufacturing, and has been taught to do it well, will continue to practice it. The great majority of druggists will probably not be influenced very much one way or another by arguments for or against the manufacture of galenicals in the store. There are, however, a few considerations which are frequently overlooked. Those who advocate that the druggist should be his own manufacturer usually declare that it would save him a lot of money. This was practically Mr. Nitardy's chief argument, and it is the chief argument also of most others. Is it based on fact? We do not think it is.

Recently, for instance, the chief chemist of one of the leading houses in the manufacturing trade told the editor of the BULLETIN that every drug assay made in duplicate in his laboratory cost the house \$4.60! This seems astonishingly high, and it even surprised the house itself when it uncovered the facts, but thorough investigation showed beyond peradventure that the figure was correct. Now if it costs a manufacturer \$4.60 to make an assay of a tincture or a fluidextract, it would cost the retailer much more than this when he figured in the cost of his time and material. He is not anything like so well equipped to do the work, and the expense would surely be greater in his case. Furthermore, the cost to the manufacturer of assaying a single lot of fluid is spread over four or five hundred gallons of product, and it therefore becomes a very small charge against a single pint. But what about the druggist who makes a pint, a quart, or at most a gallon at a time, and who must suffer this heavy expense on so small an output?

Again, the manufacturer not only examines and standardizes his finished product, but he likewise tests every salt and assays every acid entering into the preparation of his elixirs and other galenicals. The whole process of manufacture is checked up at every stage in order that results of the most positive accuracy, and products of the greatest efficiency, may be secured. It is relatively easy for him to do all this in making immense quantities of his preparations, but is it practicable and feasible for the retailer to do it? And if the retailer does do it, isn't the expense going to double, treble, or even quadruple the cost of his finished preparations? All this work must be done.

mind you, if galenicals are going to be what they ought to be, and if the retailer is going to turn out products equal to those made by the manufacturer, demanded by the standards of the time, and conforming to all the requirements of the food and drug laws. A fluid extract, for instance, cannot be dismissed after a single assay has been made. The work must be done in duplicate, and the assay repeated after the adjustment to standard strength has been made to see that proper results have actually been secured.

We do not know what method Mr. Nitardy followed in arriving at his comparative figures, but we have observed that other druggists in the past, in arriving at the cost of manufacturing galenicals versus the cost of buying them, have failed to include the element of the druggist's own time. This of course is a fatal defect in all such calculations. If the druggist is going to make everything himself, and is going to make everything right, he will find that the entire time of himself or of some well-trained man will easily be consumed. The cost of this man must therefore be charged up against the cost of the products, and not only the cost of the man, but the cost of the galenical product consumed, the expense for equipment, and the loss of alcohol and such assay materials as ether, chloroform, and the like. There has been a lot of deception about all these factors, and amateur accountants have greatly deceived themselves and their hearers. For years the BULLETIN has argued that the druggist should know what he was about in the calculation of costs, and here is another field where the same truth applies in direct measure.

Some druggists, realizing all these considerations more or less vaguely, have sought to beat the devil round the stump. Thus a resolution was introduced at the Milwaukee meeting of the N. A. R. D. which urged the druggist to make his tinctures from assayed crude drugs. The advocates of this resolution evidently felt that it was not practicable for the average retailer to assay his finished products. They felt, too, that the good old slipshod method of making galenicals and trusting to luck that they would be efficient, and uniformly efficient, wouldn't do any longer. Some assurance of proper results must be given, and so they fell back upon the idea of starting with assayed

crude drugs, purchased ready prepared for the purpose.

Now we have nothing to say against assayed crude drugs, but it has been found over and over again that, waiving the question of whether these drugs are or are not what they ought to be to start with, the preparations made from them have been far from uniform and satisfactory. The investigations made by several pharmaceutical chemists during the last few years have proved this beyond peradventure. Such a proposition, therefore, is a mere subterfuge, and we were glad to see that the resolution failed of adoption at the Milwaukee meeting, and was quietly put to sleep along with several other propositions of equal wisdom. The N. A. R. D. could not bring itself to sanction side-stepping of so obvious a character.

But, as we have already said, we do not mean to argue against the preparation of galenicals in the drug store. We have no doubt at all that in some instances they are made there with great fidelity. Our position is, however, that they ought not to be made in the store unless they are made with the same thoroughness and care with which they are produced by the reputable manufacturing pharmacist, and that when they are so prepared, they really cost the druggist more than he could buy them for. The claim of economy in this instance is mere sophistry. Furthermore, there is much in the argument that manufacturing pharmacy represents a specialized advance of the times; that the wise druggist should realize this to be the fact; that he should take advantage of the opportunity to relieve himself of the tedious detail of manufacturing work; and that he should utilize the time and the effort thus spared to him for the vigorous and energetic development of his business. An hour spent in the promotion of trade, and in the expansion of sales, is far more productive than an hour spent in the effort to realize an economy—particularly when the economy isn't realized after all.

HOW MANY OUNCES IN A POUND?

Suppose you were taking the examination of a State board for registration and the following questions were asked you: "How many ounces are there in a pound of glycerin, specific gravity 1.25?" "How many ounces in a pound of ether, specific gravity 0.762?" What would be your answer? Naturally, if one stopped to think and

caught the real meaning of the questions, the answers in both cases would be: "There are sixteen ounces in a pound, no matter what the specific gravity of the liquid may be." Yet out of some fifty odd candidates for registration in a near-by State over half of them gave answers varying according to the candidate's arithmetical skill, most of them basing their answers on a division of the number of ounces in a pound by the specific gravity of the liquid named.

On first thought such a question would be indignantly characterized as "one of the fool catch questions boards of examiners are so fond of asking;" on second thought it will be more or less grudgingly admitted that the question was given to test the intelligence of the candidates, not their skill in arithmetic. If a man is sure of his knowledge and himself such questions are easily answered, but if he is floundering in a maze of half-digested knowledge and has the common idea that pharmaceutical examining boards get their sole delight in puzzling candidates, he would at once seek for some hidden mystery in such a question and thereupon would proceed to work it out in the most complicated fashion. —*American Druggist*.

We beg leave to differ. To us these two questions are "catch questions," pure and simple. Not only are they catch questions: they are worse than that—they are stupidly misleading. We submit that, if honestly given, they can be interpreted in only one way, as if they read:

1. How many *fluid* ounces are there in a pound of glycerin, specific gravity 1.25?
2. How many *fluid* ounces in a pound of ether, specific gravity 0.762?

This, we repeat, is the plain meaning of the two questions, if honestly intended. Those who so considered them were correct, and we therefore hold that "over half of the candidates," instead of being in the wrong, were in the right. If the Board of Pharmacy in the "near-by State" penalized these candidates they certainly punished intelligence and accuracy, and to this extent made the examination a farce and a travesty.

Besides, *no question ought ever to be asked which can possibly be interpreted in two ways*. It isn't fair to the candidates. If there is ever a place where English of absolute accuracy and flawless clarity ought to be employed, it is in an examination paper.

WHY TAKE CHANCES?

Notwithstanding all that has been said and written on the subject, some druggists continue to take hazardous chances in business without protecting themselves fully against fire losses.

Here is an actual letter written not long ago by a member of a retail drug firm to one of the firm's creditors:

GENTLEMEN:

We recently had the misfortune to lose our entire stock and fixtures by fire. We were only partially protected by insurance, the amount on the stock, etc., being \$3500, but we had not taken inventory within twelve months, as is required by the insurance companies, and they penalized us 20 per cent, which left us \$2800, and what collections we could make, to pay what we owed. We have about exhausted our collections, and secured \$800, which makes \$3600 altogether, and we owe (including \$2000 borrowed from banks) \$4000. This leaves us short, as you see, about \$400, after losing every dollar we put into the business, which was \$3000 in cash, \$2000 of this being furnished by me, from which I never realized any profit but let it remain to increase the stock.

In consideration of these facts, I am asking you, and all of our creditors, to allow us a discount of 10 per cent and I will see that a check is mailed you upon receipt of your statement less 10 per cent. Please understand that we are not offering this as a compromise, but our concern was incorporated, and you see with this 10 per cent discount we shall be able to just about pay our debts.

Two shortcomings are indicated in this letter. In the first place no inventory had been taken during the last year, and presumably not for several years. A penalty of 20 per cent was imposed for this reason. In the second place, the amount of insurance protection was by far too small. It was so small, indeed, that the partners got absolutely nothing back for the money which they actually put into the business by way of capital. They lost every cent, and even at that didn't have enough to pay their creditors without asking for a 10-per-cent concession.

Why will druggists continue to take such foolish chances?

PROFITS AND EARNINGS

AN INTERESTING STATEMENT FROM CUBA.

One of the subscribers of the BULLETIN OF PHARMACY in Cuba has been interested in an address which was written by the editor of the BULLETIN, and which appeared on page 374 of the September issue. In that address a table was given presenting the epitomized business statements of 25 druggists throughout the country. Our Cuban subscriber was led to compile a statement of his own business, and

for his enlightenment he compared it with those of two other druggists taken from the table mentioned. He selected the particular statements of druggists D and E because their volume of business was just about like his. We now reproduce this comparative showing as our Cuban friend sends it to us:

	D.	E.	Ours.
Annual sales.....	\$25,107 00	\$23,823 00	\$24,475 00
Cost of goods sold.....	12,336 00	16,496 00	14,672 00
Gross profits.....	12,771 00	7,327 00	9,803 00
Expenses.....	6,000 00	6,702 00	3,387 00
Net profits.....	6,771 00	625 00	6,415 00
Percentage gross profits (on sales).....	51	31	40
Percentage expense.....	24	28	26
Total income (including proprietor's salary).....	\$7,670 00	\$1,825 00	\$9,416 00

Our Cuban correspondent writes as follows:

After a great deal of study of your interesting article in the September BULLETIN I arranged the enclosed schedule only to find that I am way off in having interpreted the "cost of goods sold" to mean the year's purchases. Won't you kindly advise me as to just what is the "cost of goods sold?" I can't seem to get this feature of the thing clear in my mind.

If my inventory a year ago had disclosed a showing of \$20,000, and the inventory now should be \$25,000, would this \$25,000 be the cost of goods sold? And does the inventory include the fixtures account? I suppose these questions seem stupid to you, but they are very pertinent to me, and I should much appreciate your shedding the light of your skill on my statement.

So far as my figures are concerned, they are all accurate, except that I have taken no inventory. I believe, however, that my stock is far above what it was twelve months ago. My personal salary is \$3000 a year, and I have taken from the business \$1374 additional. According to my bank-book, I have in the meantime increased my deposits by \$2000. Now with these facts will you tell me where I am at?

Our correspondent has made several mistakes. In the first place we may explain that the "cost of goods sold" is not the equivalent of the year's purchases. A man may purchase \$20,000 worth of goods during the year, but only sell \$15,000 of them. The remainder goes into the permanent stock and shows up in an increased inventory valuation. The goods actually sold, however, have cost only \$15,000, and it is this amount, and not \$20,000, which should be deducted from the total sales in order to arrive at the gross profits. Sometimes, on the other hand, one may sell more goods during the year than he buys, in which case the inventory valuation will show a slump instead of an increase, and the cost of goods sold will be greater than the purchases instead of less. Is this perfectly clear? It simply means that

one can tell very little about the facts until he does, take annual inventories, and until he knows what he has actually sold.

Now we have no means of knowing accurately what was the cost of the goods sold in this case. In the absence of inventories, we can only assume that the permanent stock remained the same, and that the cost of goods sold was fairly represented by the year's purchases. We then find gross profits of \$9803, representing a percentage of 40. This is very satisfactory.

As soon as we get to the element of expense in the statement, however, we strike another mistake. Our correspondent has manifestly failed to include his own salary as proprietor in the expense account. This amounts to \$3000, and we therefore have a total expense of \$6387 instead of \$3387. This one item alone changes the whole complexion of the table, and we venture now to print it in corrected form:

Annual sales	\$24,475
Cost of goods sold.....	14,672
Gross profits	9,803
Expenses	6,387
Net profits	3,416
Percentage of gross profit (on sales).....	40
Percentage of expense.....	26
Total income (including proprietor's salary).....	\$6,416

This cuts down our correspondent's showing somewhat, but even at that it is pretty good. A net profit of 14 per cent is not to be sneezed at! And a total income of \$6416 is about as much as could be expected from a \$25,000 business.

Finally, we may point out that, according to our revised schedule, net profits were realized of \$3416. This amount of money should actually have accumulated, unless some of it went into an enlargement of the permanent stock. Now how much did accumulate? Well, we find that the proprietor drew out \$1374 above his salary, and that his bank account increased also by \$2000, making a total of \$3374. This pretty nearly accounts theoretically for the net profits of \$3416, which leads us to believe after all that our friend's inventory remained about the same, and that in the last analysis the "cost of goods sold" with him was the practical equivalent of the year's purchases. Otherwise, his net profits would not so nearly have accumulated in actual cash, but would have been represented in part by increased stock.

THE HALL OF FAME

HERMAN A. METZ ELECTED TO CONGRESS.

It is of considerable interest that Herman A. Metz, of Herman A. Metz & Co., now known as the Farbwerke-Hoechst Company, was a successful candidate for Congress on



HERMAN A. METZ.

the Democratic ticket, and that he will now be a part of the Wilson administration in national affairs.

Prior to this, however, Mr. Metz has led a conspicuous life in the civic and political affairs of Greater New York. In addition to being comptroller of the city, which many people in the drug trade knew about, he had served on the Brooklyn School Board under both Mayor Van Wyck and Mayor McClellan. He had been appointed by Governor Dix a commissioner of the State Board of Charities for a term of eight years. He had been appointed by Governor Hughes a member of the Charter Revision Committee of New York, and by President Taft an honorary commissioner to the American Exposition in Berlin held during 1910. In the meantime Mr. Metz had been conspicuous in a great variety of civic and reform work. He was at one time president of the National Civic Club; he is now chairman of the Finance Committee of the North American Civic League for Immigrants, and vice-president for New York State of the National Rivers and Harbors Congress. It

would require much space, indeed, to give a mere list of the positions he has held, of the work he has done, and of the public organizations and private clubs with which he has been and is affiliated.

Born a poor boy, he has become a man of wealth and of great business responsibility. At the age of 14 he secured a position as office boy in a concern which subsequently became known as Victor Koechl & Co., of which he has now been the head for the last twelve years. In 1903 he divided his business, continuing the drugs and medicinal products in the old firm, and incorporating the house of H. A. Metz & Co. to handle chemicals and dye stuffs. He became the president and sole owner of both corporations.

DEATH OF N. A. R. D. LEADER.

J. Arthur Bean, of Boston, a member of the Executive Committee of the N. A. R. D., and the man who came near being elected president of the organization at the Milwaukee meeting last August, was recently injured quite seriously in an automobile accident. James F. Finneran, Gardner F. Murphy, Fred A. Hubbard, J. N. Cran, and Mr. Bean himself were



J. ARTHUR BEAN.

driving in Mr. Finneran's automobile through the town of Wellesley, Mass., in the middle of the afternoon, when a car driven by the superintendent of the Water Department of the city suddenly appeared from a side street and struck the rear of Mr. Finneran's machine before it could be gotten out of the way. Mr.

Bean and Mr. Hubbard, seated in the tonneau, were thrown violently from the car. Mr. Hubbard escaped with a severe shaking up, but Mr. Bean was unfortunate enough to have both of his legs broken, compound fractures resulting in each case.

He was quickly removed to the Newton Hospital, where he was attended by a prominent surgeon from Boston. For several weeks thereafter he progressed as rapidly as could possibly be expected, visited daily with his family and friends, kept more or less in touch with his work, and was about ready to have a telephone installed at his bedside. On the night of November 10, however, he suddenly became worse and died before morning.

Mr. Bean owned two stores in the Somerville district of Boston, and was at the head of a coöperative cigar company in New England. He leaves a wife and a son.

THE FIRST VICE-PRESIDENT OF THE N. W. D. A.

At the meeting of the National Wholesale Druggists' Association, held during October in the city of Milwaukee, William B. Strong was elected first vice-president of the organization. As chairman of the Entertainment



WM. B. STRONG.

Committee at the Milwaukee meeting, Mr. Strong had commended himself favorably to every member, and his choice for the vice-presidency was one of great popularity. Further than that, he has been active in the N. W. D. A. for many years, and for some time has been a member of the Board of Control—that inner directorate of five men which really rep-

resents the power of the organization. In business life Mr. Strong is the vice-president and treasurer of the Milwaukee Drug Co. He is a man of pleasing personality, and has many friends in the Association. The Milwaukee Drug Co., by the way, has recently erected a new building for its operations, and it has one of the best equipped jobbing houses in the country.

A DRUGGIST'S RESIDENCE.

On another page this month we are showing the homes of six well-known druggists. A seventh photograph, for which there is no room in that place, we may reproduce here. It shows the residence of John Weyer at 2266 Harris Avenue, Norwood, Ohio. Mr.



Weyer is well known to Ohio pharmacists as the secretary and general manager of the Retail Druggists' Mutual Fire Insurance Co. of that State. It may also be said that Mr. Weyer was a member of the first board of pharmacy appointed in the State of Ohio. He served from 1884 to 1895.

THREE MARRIAGES.

The daughters of three men prominent in American pharmacy have recently been married. Elsie Baily Remington, daughter of Prof. Joseph P. Remington, Philadelphia, Pa., was married to Charles Carver, Jr., on October 24. Mary Belle Kennedy, daughter of E. J. Kennedy, editor of the *Pharmaceutical Era*, was married to Edward A. Dougherty on the evening of November 26. Natalie Nimmo Hynson, daughter of Henry P. Hynson, Baltimore, Md., was married to John Z. Bayless on the evening of November 27.

A New Prize Department: QUESTIONS AND ANSWERS.

If there is anything the BULLETIN OF PHARMACY is proud of it is this, that most of its best and most practical material has come from readers of the journal themselves—from druggists, managers, and clerks actually working behind the counter. The BULLETIN has developed into a true co-operative agency—a place where our friends exchange ideas and methods with one another to their mutual profit and interest. As a further step in the realization of this ideal we now announce a new prize department of Questions and Answers.

\$1.00 EACH FOR QUESTIONS.

The first part of the plan is that *we shall pay \$1.00 each for all accepted questions.* What kind of questions do we want? Well, we do *not* want such questions as we answer monthly in our own department of "Queries"—questions regarding formulas, methods of preparation, manufacturing processes, and the like. This isn't the idea at all. What we are after are questions touching vitally on the conduct of the business—large questions involving important considerations. Thus, for instance, to show in detail just what we mean, and to start off the department properly, we announce this month the acceptance of the following three questions:

1. *What is the best location in the store for the soda fountain, and why?*
2. *What is the best, the easiest, and the most effective method of taking an inventory?*
3. *How do you collect your accounts and prevent deadbeats from getting the best of you?*

So much for the first group of questions. We want more for future issues of the BULLETIN, and we repeat that *we shall pay \$1.00 each for all questions which we accept and print in the journal.* Now as for the second part of the scheme, let us say that we shall pay

\$5.00 EACH FOR WINNING ANSWERS.

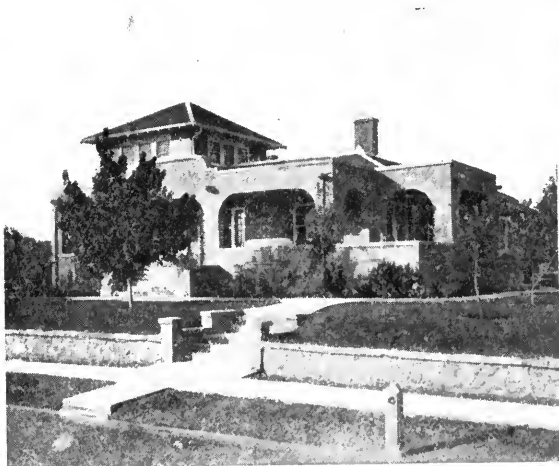
This month we solicit separate answers to the foregoing list of three questions. No one contributor need answer more than one question unless he desires. Three prizes will be awarded—one on each subject. That is to say, we shall pay \$5.00 for the best reply to each question—\$15.00 in all. In addition to this we shall probably print some of the answers which do not win the awards, but when we do we shall pay regular space rates for them.

Here are the conditions: (1) Each answer should be approximately 500 words in length, although no objection will be made to replies which are somewhat longer than this. (2) Answers must be in our hands not later than January 15. (3) Please write on one side of the sheet only and put your name and address on your reply.

Now, then, we are ready to start off. The first group of answers will appear in the February BULLETIN. In that number we shall also print some new questions which have been accepted in the meantime, and to which replies will be solicited for subsequent issues—and so on month by month. We hope to secure by this method some excellent material. We want to get live questions touching the very heart of the druggist's business. We want to find out what druggists are really most concerned about in the conduct of their stores, and we want to have a flood of light thrown on these vital themes by men all over the country.

Please therefore send in both questions and answers—the more the merrier!

THE EDITORS.



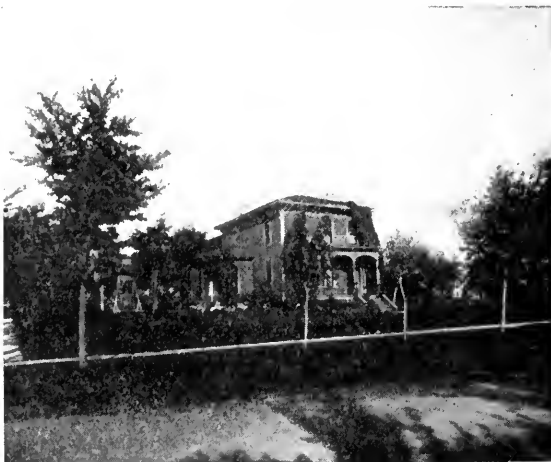
This beautiful mission bungalow is the home of J. Y. Pearce, the owner of two drug stores in Ballinger, Texas. There is a large court and fountain in the center, surrounded by plants, flowers, and sea-shells.



Frank Farrington, of Delhi, N. Y., until recently a retail druggist, and a well-known writer on commercial subjects for the pharmaceutical journals, has lately purchased this handsome colonial residence.



Every alumnus of the St. Louis College of Pharmacy will be interested to know that this is the residence of Prof. James M. Good, who has held the chair of pharmacy in that institution for many years.



W. S. Parker, of Lisbon, North Dakota, who has been a member of the State Board of Pharmacy for a considerable period, has a big playground for his family, while an automobile may be seen in the back yard.



Here is another druggist with an automobile—Charles F. Nixon, of Leonminster, Mass., a professor in the Massachusetts College of Pharmacy and a member of the U. S. P. Committee of Revision.



L. W. McConnell of McCook, Nebraska, is a member of the State Board of Pharmacy, and is one of the solid and substantial druggists of the State. He may always be found in attendance upon the annual meetings of the State Pharmaceutical Association.



Eugene Watrous, Enid, Okla., elected last month to the State senate for four years. Republican.



Will Brookley, Edgar, Neb., elected last month to the State senate. Democrat.



Frederick W. Bloeki, Chicago, Ill., elected as a Democratic member of the Chicago Board of Review.



W. C. Reser, Bristol, Tenn., member of the City Council and State Coal Oil Inspector.



Al. A. Lenocker, Oakland, Iowa, reelected a member of the Iowa General Assembly.



T. J. Shannon, Sharon, Tenn., who is serving his third term as mayor of the city.



Henry O. Carhart, Blairstown, N. J., elected a member of the New Jersey Assembly.



George A. Hastings, North Adams, Mass., Republican candidate for the State senate.



David J. Kuhn, Nashville, Tenn., serving his second term as a member of the City Police and Fire Commission.

Druggists in Public Office.

Three Prize-winning Vacation Stories.

In order to stir up a healthy rivalry, and to uncover hidden and unsuspected literary talent, Parke, Davis & Co. offered their employees last summer three cash prizes for the best narratives describing vacation experiences. The editors of the BULLETIN are much pleased to be given the privilege of printing the three prize-winning stories. It will be recalled that we ourselves conducted a similar contest a couple of years ago. So much interest in the subject was then exhibited by our readers that we feel sure of a hearty reception for the present group of articles.—THE EDITORS.

1. AN IDEAL VACATION.

BY WINONA WILSON.

One of the requisites of an ideal vacation, to my mind, is that there shall be none of the every-day routine and hurrying—none of the eternal getting somewhere, everywhere, (and sometimes nowhere!) on the minute. It therefore required much quiet reasoning with myself on the morning of my departure for the country last June, when, upon waking, I found that I had but one short hour to rise, dress, pack, eat my breakfast, and get away. By absolutely refusing to lose my head, however, I arrived at the station fully five minutes before the train started, and, after comfortably settling myself and depositing in my suit-case sundry articles which had been thrust into my hands at the last moment, I was prepared to enjoy my journey.

HUMAN NATURE AS SEEN ON A TRAIN.

Few sensations give me more pleasure than riding on a train—there is so much to see, both inside the car and along the way. People display their characteristics so unconsciously and unblushingly when traveling that it is amusing, and oftentimes interesting, to observe them. I remember particularly, on this journey, a mother and her two sons. What first attracted my attention was hearing the mother say, in gentle, well-modulated tones: "Boys, wouldn't you like to take off your coats and roll up your sleeves?" Would they? Did you ever hear of boys who wouldn't? This would have passed without further notice, but presently I heard the attentive mother saying: "Boys, here are some cookies mother brought for you to eat on the train." And this, mind you, without a word of coaxing or teasing on the part of the boys! And finally, when she gave them small portions of milk chocolate, and insisted upon

the smaller boy stretching out on the seat when he became tired, and resting his feet in her silken lap, my admiration passed all bounds, and I thought: "Well, here is an ideal mother!"

There were numerous changes to make during the day, however, and mother and boys soon faded from mind. Arriving at W—— about sunset, I took my place in the omnibus and prepared for a pleasant drive along two miles of winding roadway, between banks of wild roses and daisies. The small Ontario village where I visit is situated at the top of a high ridge or mountain surrounding Hamilton Bay, and every now and then we caught a glimpse of the blue water as we gradually ascended, while on either side of us well-tilled fields stretched into the distance, where the young grain was just beginning to break its way through long, straight furrows.

One was not to be left in uninterrupted contemplation of all this beauty, however, for the so-called "omnibus" was provided with long side seats only a few inches in width, and ever and anon, with the jolting of the wagon, came the feeling that you *must* slide to the floor and secure a firmer resting place. But this ordeal has lost its sting, and, upon looking back, I can see nothing but the winding road at sunset, the approach to the village through the long avenue of trees, and my aunt at the gate waiting for me.

LONG, PEACEFUL DAYS.

Then followed such long, peaceful days that the very memory of them still rests me. To sleep until noon; to eat as many or as few meals as one desires; to sleep again—surely this is rest which best appeals to the tired worker! After a few days of this drowsy ex-

istence, however, one begins to feel an interest in the surrounding country, of which just a glimpse was obtained during the drive from the station. And for the purpose of calmly viewing the country, and enjoying the beauties of nature, let me recommend a blind horse and an old-fashioned carriage. Automobiles are very well for those with whom speed is everything, and a spirited horse is a joy forever, but when you wish to loiter along and drink in the scenery, a blind horse, I say, is the thing.

THE MERITS OF A BLIND HORSE.

Our horse is something of a village celebrity, being preferred by certain ladies for driving because of her extreme safety. Except when engaged in this gentle service, she roams the hills from dawn till dark, and when fully harnessed and ready for the road (blinders and all), Dolly has the appearance of a perfect horse until you look into her poor, sightless eyes. They say she knows the roads for miles around, but, while this may be true, it requires much skilful management to keep her to the middle of the road. Her absolute dependableness, however, counteracts this slight inconvenience, for Dolly is afraid of nothing. Automobiles? They mean nothing to her, for she has never seen one, and tourists stare in wonder when Dolly ambles along without even

winking an eyelash as their machines fly by. What pleasant drives we had with her! Stopping now and then to snap a particularly fine view, or to gather daisies and wild roses! Occasionally we alighted to strip a patch of wild strawberries of its luscious fruit, and once we stopped at a wayside creamery and had cool drinks of buttermilk.

So passed the long, quiet days—uneventful except for their very quietness—until the morning of departure arrived. There is an old-fashioned stage coach plying between W—— and the adjoining city, six miles away, which affords a pleasant variation from the regular mode of travel. Naturally, a city-bred person is always on the alert for adventures of this kind, and it seemed to me that the best way to ride in a stage coach was high up on the front seat, where nothing could obstruct my view of the passing scenery. I therefore climbed up beside the driver, who cracked his whip, and away we flew! Up hill and down dale! Over bridges and under bridges, and around dangerous curves where a speeding automobile might suddenly spring upon us! And then at last the long bridge across the bay, leading to the city!

Surely an ideal vacation, with lasting memories of rolling hills, blue sky and pleasant waters.

2. VACATION INCIDENTS.

BY BERTHA M. MASSNICK.

A clang of bells, a shrill whistle, a bumping, jolting and straining, a slow gliding out of the busy station, and I felt that my vacation had begun in earnest. The speeding train soon lost to view the towering sky-scrapers of the smoke-blurred city.

Through open, hilly country, rich with promises of abundant harvest, we sped. Cattle dotted the landscape and a riot of wild bloom decked the wayside. Small, sparkling lakes and streams imprisoned in their mirrored surface the cloud-flecked sky, and reflected in their quiet margins the shoreline of trees, brush and stubble.

The train wheels seemed to take up Nature's refrain, singing "Peace and Plenty," "Peace and Plenty." And something within me escaped from the crowded, stuffy train and leaped to the freedom of space—out of the here into the nowhere.

"Eden!" "Eden!" called the sonorous voice of the brakeman. "Eden!" My daydream vanished, for Eden was my destination. So, gathering together my belongings, I stepped from the train into the heart of the country.

Mrs. Hostess met me with horse and buggy, and I enjoyed my first ride through the country to the farm home in Aurelius, the next small town. My friends had prophesied that I would not have enough interesting news to fill the line-margin of a picture postal. Well, here goes my line:

This little village comprises about a dozen widely-scattered homes, and two stores so small that in either of them one could almost touch the four walls by circling with outstretched arms. Nevertheless, the proud boast is made by both merchants that anything ranging from a needle to a haystack can be had for the mere asking, and from some nook or

cranny, after much patient searching and continued assurances that they have just what is wanted, it is produced, dusted, and handed over with a grin which quietly says—"I told you so!"

I adopted the country sombrero with becoming effect, but could not conceal from the natives my tenderfoot propensities. Even the ducks had me spotted as a city-bred. As I passed a pond where they were splashing and gossiping, they all took up the cry "Quack! Quack!" How did they know I was in the drug business?

One day Mrs. Hostess and I were on the porch, very busy doing nothing, when the hired man passed with a splendid four-horse team on his way to a gravel pit four miles distant. "Wish he would let us go along," I suggested. Mrs. Hostess asked him if we might go on an afternoon trip. He consented rather shortly with: "Sure, I'll be back at one."

CAUGHT IN A THUNDER-STORM.

One o'clock arrived, but no chariot and four. "He is dodging us," I ventured.

"No; Jim said he'd take us and he will."

"Then he is cussing over the complications of a stiff collar and a four-in-hand."

At 1:30 Mr. Jim arrived, with a clean shave and a broad smile. After gallantly assisting us into the wagon he submerged himself into a silence out of which the wiles of neither of us could pull him.

The day was sultry and threatening, but we pinned our faith to the sunshine rather than to the distant, lowering clouds that looked so grim and threatening.

We jogged along leisurely. Beauty and fragrance greeted us all along the way. Countless voices twittered, hummed and sang, blending in perfect harmony with the peacefulness of the scene.

"Zip!" flashed a streak of lightning across the darkening sky.

"Boom!" rumbled the deep voice of rolling thunder.

Nature seemed hushed for an instant into breathless silence. Then the wind with its wailing song surged across the fields of rustling grain and through the tree tops, which swayed with groans at the increasing fury of the impending storm.

Blacker and more threatening lowered the sky. Flash after flash of blinding light

streaked the gloom, and more ominously roared the cannonade, vibrating for a moment into sullen silence, only to break forth in fiercer blasts.

The horses were urged on to full speed. The sharp crack of their mailed hoofs struck sparks from the graveled road, and the heavy wheels crunched their song with that of the Storm King's mighty roar.

Mr. Jim emerged from his silence and informed us, by shouting and pantomime, that there was a barn around the approaching corner in which we might find shelter from the storm, if we could but get there before it broke. Meanwhile the vibrations of the heavy wagon made it almost impossible for us to keep our seats. Mr. Jim, however, stood braced with feet apart, and seemed *not* to be stirred by the heavy, tossing motion.

It was a mad and exciting race. Great drops began to splash about us as we neared the promised shelter from the opposite side of a barbed-wire fence. Satan could not invent a more perfect device than that fence for the cultivation of profanity. We made three attempts to scale the pesky thing, and almost decided to take the soaking rather than endure its fangs any further. A blinding flash and deafening roar spurred us to make another desperate attempt to conquer the thing. We finally succeeded in getting over, leaving a fluttering fringe of raiment behind us.

The rain descended in torrents as we ran for the shelter provided by a most dilapidated old barn which leaked like a sieve and which seemed to hold in malicious sport the vibrations of the storm's fierce roar. At our approach about forty little pigs scrambled in wild fright out into the storm. Such a chorus of protesting, indignant grunts and squeals! The storm was too much for them, however, and they ventured into the barn again and, crowding into a far corner, watched us anxiously, their pink snouts trembling with nervousness.

The storm lasted but fifteen or twenty minutes. The after-glow was a revelation of wondrous beauty. Everything sparkled and dripped through the grace of a good cleansing. Mr. Jim and team had gone on to the gravel pit a short distance away, so we walked there and stood on the hill while the wagon was being loaded.

The passing storm still flashed and grumbled in echoing calls and, gathering the trailers

of its sombre clouds, scurried forward to new fields of conquest.

Over us the sun was shining, the drained clouds floated in snowy splendor, and all the voices of nature resumed their songs.

A SUNDAY IN THE COUNTRY.

Awakened at an early hour by the joyous, flutelike notes of a song sparrow, my eye caught the first flush of sunrise through the open door. The voices of Nature called, and, hastily dressing, I went without. Sunbeams were already tinting the dew-covered earth with rainbow hues. Chanticleer called lustily; the lowing of cattle and the hum of the busy insect-world reached my ear; and I seemed listening to a morning song of praise.

An early breakfast followed, and then a drive through the country with my hostess. A breath of freshness and an air of peace prevailed. We were greeted by the merry song of a bubbling brook which dashed its way over stones and through a tangle of watercress. A short stop revealed the fact that we had found the birds' swimming pool. There they dipped and splashed and preened with much clatter, and, as they drank, lifted their tiny heads in what seemed like devotional thanks.

The country is so peaceful and restful, especially on a Sunday! The great threshing machines, harvesters and binders stand hushed in fields of golden grain.

Reaching home again, our next thought was luncheon. The woods at the end of the farm beckoned, and, packing a hamper, we answered the call. Such a royal salute greeted us! The song of the birds filled the wood with melody. The trees rustled a note of welcome. The ripening May-apple and the rich blend of woodland scents gave forth a fragrance unmatched by human skill. Where the sun had not as

yet penetrated, the shrubbery and delicate undergrowth were festooned with ropes of dewy pearls and webbed lace. No weaver could match the texture and spring of the mossy carpet spread so lavishly with its wealth and variety of delicate ferns and wild flowers.

Soon the fumes of our dinner ascended from the crackling wood fire, and mingled with the fragrance of the forest. Besides a well-filled basket of goodies, our repast consisted of potatoes, bacon and coffee. Only by eating them, can one appreciate the deliciousness of potatoes baked in a sand oven.

Our table was beautifully decorated with dainty ferns and wild roses, which grew in abundance all about us.

The dinner was a happy success, and how we did enjoy it in our royal banquet chamber with a full orchestra of woodland songsters!

We lingered in our dell until the shadows lengthened, but coming out into the open we found the day still bright.

From a hilltop on our way home we viewed the sunset and the afterglow. It was gorgeous. The rich blending of color gradually faded away until it seemed as though we were in a bit of Dutch country, so deep were the blue shades of twilight. The windmills which dot the country helped to heighten the illusion.

The evening matched the perfect day. Countless stars studded the sky, and the moon hung as a golden crescent. As we sat silently on the veranda—each no doubt feeling too keenly the influences of the day to break the spell by speech—a host of inspired singers seemed to hover about, each hymning his song of praise to the measure of Nature's revelation to him. The evening was filled with melody and

Earth with her thousand voices praised God.

3. A VACATION IN THE OLD HOME TOWN.

BY CHARLES H. MERRILL, M.D.

"Why not go back to the 'Old Home Town' for our vacation this year," suggests your dutiful 51 per cent. You had not been back for a long time at this season of the year. You had made one or two trips at Easter, and had been home once or twice at Christmas. But you, a boy brought up in the country, had not for years seen a "binder" or "sulky-plow," except from the window of a fast-moving train.

The suggestion is no more made than you act on it. You send a letter to "dad" that night, and then you begin thinking—thinking of the good times of long ago, of the "old tree" swimming hole, of the broad, shady streets and the places they lead to. As in a flash it comes over you. What is a vacation for if not for rest and quiet? With a whoop and a jump you catch a bundle of surprised

woman and girlhood in either arm, and as they try to pull away, with some doubt of your sanity, you exclaim:

"Will we go? Well, I guess yes! It will be the time of our lives."

THE TRIP OUT.

Four days makes a short time for ordinary planning and packing, but not this time. Saturday morning found you all ready and eager. You reach the suburban waiting room hot and breathless. The usual Saturday crowd is there, and it is some time before you can find the rest of your family. At last all are corralled, tickets are bought, and you join in the rush for the car. There are people enough for three cars, and you crowd and fight worse than any Black Friday you ever went through at Ann Arbor.



The old home road with its shading maples.

Finally the last fat woman and all her bundles are squeezed in and you start.

The ride is uneventful to you to whom the country is an old story, but to the wife who has lived in a city all her life it is a never ending procession of beauty. Far off across the hills may be seen the white patch of a field of buck-wheat in blossom, outlined by the yellow stubble of cut grain or the green of waving corn. Closer in you see the winding course of a river with its overhanging willows. Here and there are cattle standing knee deep in the water, and as you flash by one shaded nook you see a dozen little white forms, naked as on the day of their birth, cut the water in one clean line as the rush of civilization flashes by.

And so it goes. Through towns and farm lands the "Limited" rolls along until things begin to look familiar.

Yes, that's the "old Jones'" place. There is the "stone school house." Here is "Long Lake" with its wealth of pond lilies. Presently the houses come closer together. Some are new and pretentious, others old and weather beaten, but oh, so familiar! With a creaking of brake-shoes you round the corner into the main street.

It's the same old street—changed somewhat perhaps, but the main street of the "Old Home Town" will always be the same.

Dad is there to meet you at the waiting room. How different he looks from the men you know and see every day! Gray of hair and broad of shoulder! Clear of eye, and a healthy outdoor color in his cheeks! How happy he feels and looks as he helps you in. Maybe, after all, there *is* something wrong with his eyes, for you see him wipe the back of his hand over them two or three times at greeting you.

At last you are in the wagon and, giving the dancing, high-strung colts their heads, you start over that old, old road—the road with its high gravel center, its shading maples, its broad, well-kept fields on either side. Can you, will you, ever forget it?

As you drive along in the growing dusk you fall into the spirit of quietness and of rest that you know will be yours for the next few days.

LONG-FORGOTTEN DELIGHTS.

Vacations to many people always suggest a lot of bustle and going about. With you this year it is to be different. As the rested feeling, the "all-slept-outedness," comes over you, you think of that two-foot feather bed you slept on the night before and compare it with the "feathers" you are accustomed to in town.

You look at your watch. What, only five o'clock! In the city you thought it awful to get up at six. Here you have been up a whole hour and you feel like a two-year-old. As you go in to breakfast you compare this also with your usual morning fare.

Melons that you picked the night before! Cream from milk that you had tried to milk yourself but found you had forgotten how! Eggs that you helped find in the haymow! And ham—well, you had had no hand in securing that, but you had been out behind the

barn where a bunch of squealing, grunting "porkers" were making ham for next year, and you know of old how that ham tasted!

After breakfast you wander out into the yard and over to the orchard. Harvest apples in plenty and some of the other early ones are ripe. You see here and there a flashing, rainbow-colored butterfly. From every tree and bush comes a full-throated chorus and you try



The old swimming hole frequented twenty years ago.

to remember the names of the songsters. As a boy you knew them all, but now not one—unless it may be the robin's familiar note. A few years on the pavement, with hardly a bird to be seen other than the chattering sparrow, soon drives the bird lore out of a fellow.

During the long sultry afternoons you lie in a hammock, under the shade of trees whose leaves rustle with the ever-present breeze. As you doze and dream you hear the hum of bees and the chirp and twitter of the nesting birds over head. Your face and arms are burned with tan, and when night comes you go to bed tired in the right way, and sleep the sleep of a healthy man.

THE ANNUAL PICNIC AND FESTIVAL.

A day or so after your arrival you see the advertisement of the annual farmers' picnic and harvest festival. Did you ever attend any such affairs? If you would boil all the Mardi Gras, Hudson-Fulton Festivals, and Cadillacquas into one, you would never have the care-free, honest pleasure that is yours at one of these picnics.

You are up with the sun this day, and you start early for down town. From a point of vantage you can see the crowds begin to gather. Here is a load of boys from a threshing outfit who have laid off for the day. See how care-free they are! Sunburned to the

color of copper, for all their big hats! Do you ever see their like in a city? And the wagons loaded with the farmers' families—the father, the mother, perhaps a grandmother and four or five children, and the bursting baskets of lunch!

Soon the sound of music is heard and down the street comes the parade—the fire department with gaily decked apparatus, the local company of the National Guard, a uniformed rank of local knights, the council, and others in autos and carriages. Prizes are given for the best decorated motor, business float, and farmer's rig. Many of the latter are decorated in natural flowers and grains. One especially that you could not help but admire is covered with cattail rushes and pond lilies.

And after the parade comes the picnic on the fair ground. You have gone to many a picnic where there was a mad scramble for a place on the boat, and a still wilder one for a bench on the picnic ground. But here you saw none of that. Each family party had its own circle. There were no benches or tables—just a cloth spread on the ground. But such a lunch! Fried chicken born since Memorial day. Hard



"A bunch of squealing, grunting porkers."

boiled eggs not twenty-four hours old. Layer cakes with frosting mountain high. Lemonade and new sweet cider to drink. And pie—oh, how your mouth does water! Here and there you will see perhaps a few watermelons, but whether it be melon or pickles, bread or cake, you may rest assured that it is fresh and good—better than you ever imagined existed.

Then when all have stuffed to capacity the sports begin. Two teams of farmer boys are settling up old scores at baseball, while their fathers wager cigars and even a furtive quarter or so on the races.

Pleasure and fun there are for all, whether it be the blasé city man or the small country boy, whether it be the city matron in her luxurious touring car, or the mother from the country whose son has just won the race for farm-bred colts. And as the afternoon sun begins to wane, and the crowd melts away, you ask yourself: Where was there ever another picnic like this? Where have people mingled before in such good fellowship and concord as to-day? "OLD HOME" PLEASURES.

On the next day you go fishing perhaps, and the husky blue gill, or maybe a river bass, gives you a taste of what fight and fish really are. There comes a rainy day, but that is small loss to you. Into the library you go until the rain ceases. You have seen pictures of old-fashioned fireplaces? Well, picture one like some of these made of rough field stones, with books piled high on either side of the room. Start a brush fire in the fireplace, and see if you will change places with any of your friends who have gone to any of the so-called summer resorts?

And thus you while away your vacation. You are up with the sun. You go fishing two or three times, or go down to the same old swimming hole you frequented twenty years before. At night you hitch up and go to town.

Perhaps it is "band night," and you meet the boys and girls you used to know. They are boys and girls no longer. Many of them are in business. Many are "Mrs." instead of "Miss," but once again you hear the old stories—hear again of old friends. You learn that "Bill" and "Dutch" are out west, that "Pink" went to Florida, and that such and such a girl has gone on the stage.

And then comes that day when you know you must cut loose. How you hate the thought of giving up the peace and quiet, the bounteous living, and again lock horns with other fellows and join in the endless routine of business!

BACK AGAIN!

But you are back again. How close and stuffy you feel in the city! How narrow are the streets! How shut in are the rooms! But as you stretch and pull yourself to your full height you feel the better for those few days in the open. You feel equipped to withstand the buffets of fate, knowing that somewhere there are green fields and cool breezes and big-hearted, generous people—people always waiting to welcome you back, to make you once again the man you were, to bring the tan of health to your cheeks, and to renew that contentment of mind which is the chief joy of the strong and vigorous man.

THE FUTURE OF MEDICINE AND PHARMACY.

An Interesting Prediction of Changes by a Pharmaceutical Philosopher—Both Doctor and Druggist will be Engaged in Preventing Instead of Curing Disease, and Their Occupations will Be Radically Different from the Present.

By WILLIAM G. TOPLIS.*

The year eighteen hundred and eighty-one is destined to become known in medical and pharmaceutical history as the beginning of the most revolutionary epoch in all of the experience of those branches of endeavor.

That year brought forth a discovery the importance of which is not yet generally recognized. Not alone is it concerned with medicine and pharmacy, but it has performed a most important service in engineering projects of world-wide importance. It may be truthfully

said that this discovery and those it led up to made possible the building of the Panama canal.

It was a most important factor in bringing victory to Japan and defeat to Russia.

It is banishing pestilence from its breeding places everywhere, and no department of life, either animal or vegetable, is beyond its influence. It has placed the practice of medicine upon a scientific basis, and inaugurated the era of preventive medicine. The day of curative measures, with which we are most familiar, is passing. In most of the cities and large communities of the world public hygiene has be-

*Read at the 1912 meeting of the Pennsylvania State Pharmaceutical Association, and especially communicated to the BULLETIN OF PHARMACY.

come a very important department of government. Observe our own city of Philadelphia. We have there the largest water purification plant in existence. Its effect in that city is to reduce the number of typhoid-fever cases eighty per cent of the former total, and perhaps one hundred per cent of the water-borne typhoid, peculiar to the Philadelphia water-supply. A case of typhoid fever commonly runs three months. In money it is worth from fifty to one hundred dollars to the attending physician, perhaps half of that to the druggist.

CONTROLLING GERM DISEASES.

A similar change has taken place in diphtheria. Antitoxin and treatment are supplied to the patient at the expense of the communities in by far the greater number of cases.

Smallpox is practically unknown for similar reasons.

Bacterins and phylacogens as prophylactic and curative measures against typhoid, and a number of other diseases, are coming into increased usefulness.

Chemotherapy. The latest advance has done astounding things. With one treatment of "606," salvarsan, specific disease disappears, often returning no more.

Much is promised from the same source in the eradication of cancer.

Leprosy, incurable from remote antiquity, seems about to succumb to the new enlightenment.

The extermination of tuberculosis is within hailing distance. And so it goes through the whole category of ills that plagued the people, unrestrained, less than thirty years ago.

PROPHYLAXIS AND PHARMACY.

The transcendental discovery by Dr. Koch that has made possible all of these wonders and many others besides, and others yet to come, is the simple fact that microscopic organisms grow in pure culture, upon a piece of boiled potato. This is the corner-stone upon which has been built the whole science of modern bacteriology. With these facts confronting us and others of a like nature to follow, we naturally turn to inquire what effect these changes are likely to exert upon the practice of pharmacy.

Every pharmacist has observed the greatly increased development of the commercial side of the drug business as compared with its

scientific side, which rather seems to be accorded a secondary place in the conduct of its affairs, regardless of the fact that this feature is the one that gives it character, and the only one that distinguishes it from ordinary merchandising.

Thirty years ago the physicians whom we knew were high-minded, dignified gentlemen. They held the ethics of their profession in such esteem that they scorned to violate them. We could not imagine any of them passing out a handful of tablets to an office patient for a fifty-cent fee. And yet the man of to-day who practices medicine under such conditions is to be condemned no more than his predecessors are to be commended, because each of them is a product of the conditions of his day. Truly the change is to be deplored, and the remedy is not yet ready. Thus we have a dreary spectacle, the most noble calling on God's green footstool degraded, through its commercial side, into a mad competition for existence. There are some other causes beside those noted that contribute to the same effect, such as the increased numbers of individuals in both medicine and pharmacy. The later causes, however, are self-limiting and not necessarily fatal to the calling as a business proposition, whereas with preventive measures well established it is plain to all that both the practice of medicine and pharmacy as now conducted come to their end.

NEW ORDER OF THINGS.

This does not mean that both doctors and druggists will disappear completely, but it certainly means that a new order of things is upon the threshold.

This is the year nineteen hundred and twelve.

Between the years 1922 and 1932 we may expect to have established a National Board of Health, with a chief officer in the cabinet and an organization similar to that of the army. Thus every physician and every pharmacist will be an officer of the United States government. Under the new order, those physicians who remain in the office awaiting the call of the sick will be comparatively few in number. The remainder will be out in the broad domain of practical hygiene. Every factory, farm, field, forest, stream, mine, and what-not will then come under the watchful eye of this new army. With all of the wisdom of science it

will guard the health of the country, if anything, more jealously than it guards against foreign foes. Every occupational disease will be banished; every case of communicable disease will be promptly isolated.

WHERE DOCTORS AND DRUGGISTS COME IN.

The men who are to perform this service will be the doctors and druggists of to-day who survive at that time, together with those who shall be hereafter graduated in those professions. Not that all of these men are at present fitted for this work, but their training and experience make them the most available. They will, however, be subject to periodic examinations that shall determine their advance and pay, and each one will graduate into the place that best suits his capacity.

The pay of these men will be suited to the dignity of their calling, certainly not less than that of a lieutenant in the United States army.

Under this new order the people will receive their medicine and medical treatment upon the same plan that they now receive their public school education.

To the incredulous it may be said that the people of Philadelphia alone spend annually fifteen million dollars for medical treatment and medicine. Under the new system the cost would be less than half of that sum, and the people would receive better attention than at present.

Schools of medicine and pharmacy will be government institutions as are West Point and Annapolis, and their various laboratories will be the main centers from which the operations of this hygienic army will be directed.

To the incredulous, again, it may be said, these conditions are coming not because they are being sought, nor even desired, but they will be thrust upon us through the force of economic necessity.

"MY BEST PAYING SIDE-LINE."

The Tenth of a Series of Special Articles—Trusses are this Druggist's Specialty—The Selection of an Instrument—How to Fit it Properly—Both the Commercial and Scientific Phases of the Work Discussed.

**By E. C. REYNOLDS,
Iola, Kansas.**

One of the things that made the greatest impression on us in selling trusses was the remark of a great many truss wearers: "I purchased my last truss from —— (mentioning a competitor), and it did not prove satisfactory; so I thought I'd go somewhere else this time and see if I could not get a better fit." That remark did not impress me so much at first, but continual repetition had its effect. The result was that I concluded that none of us were furnishing the proper truss for a given hernia in the great majority of the cases.

If we failed several times out of ten to furnish the correct size, style, or shape of pad, or if we had sold an elastic web truss when a spring truss would have given better satisfaction, there must certainly be some reason for it. It became our duty, then, not only to our customer, but to ourselves as well, to learn the causes of the more common errors and, if possible, to avoid them.

DIFFERENT KINDS OF HERNIA.

Obviously, all hernias were not identical. It was equally obvious that the same truss would not fit all kinds of rupture. All trusses were not alike. Therefore, a given hernia could not be held by any style of trusses. The conditions under which they were worn varied. Smelter workers and acid plant workers on account of the acid vapors in which they labored could get better results from a truss in which there was no rubber, or at least the minimum amount of rubber. This was true, too, of workers in cement factories who were exposed to heat and chemicals. Those whose habits were to a large degree sedentary and whose occupations demanded the maximum amount of comfort might better be fitted with an elastic truss of some good make.

Again, the proper pad should be selected. Customers have appeared before us with pads made of old buttons, these sometimes project-

ing into the very aperture in the abdominal wall. Others have worn water pads until the water was completely exhausted, the metal parts of the fittings making a protuberance in the pad that served to hold open and enlarge the aperture. This, of course, causes a more rapid enlargement than if no truss were worn. Certainly a water pad was not what these persons should have had. Neglect of the pad had in these cases not only failed to give them the relief they sought but had positively destroyed all chance of a cure by irritation which sometimes takes place in the earlier stages. In short, an ill fitting truss clearly does more harm than good.

THREE IMPORTANT CONSIDERATIONS.

Three things then stood out quite clearly. We must get a good general idea of hernias, their varieties and extent. We must select trusses to fit each variety, or at least come nearer to fitting the different kinds of rupture. Lastly, we must always instruct the wearer as to the proper application and use of the truss.

We find two varieties of hernias, inguinal and umbilical. These are about the only ones met with in our line, the inguinal constituting by far the greatest number of the cases. As a hernia is said to be a protrusion of a viscus from the confines of its natural cavity, it will be seen that one might occur at various points and from various reasons. Of the umbilical hernias we have little to say. We do not meet with them often in the drug business. They occur usually in the new-born, and are nearly always under the care of the attending physician, by whom proper measures for their relief are taken.

Umbilical hernias in adults are comparatively rare, although I have seen several. From my observation these occur mostly in men and are nearly always produced by the strain of heavy lifting. One occurring in a man who was a house mover by occupation grew to quite a large size in a period of two years before he would provide himself with a proper truss. We carry only a small stock of trusses for umbilical hernia, preferring to order them direct as needed.

I do not believe it within the province of this paper to cover causes and locations of hernia except for the purpose of applying trusses. For this purpose I invariably examine the customer, inquire into his occupa-

tion, and then feel myself in a position to offer advice as to the kind of truss that should be worn.

SELECTING A TRUSS.

For a simple oblique inguinal hernia where there is but a small opening that can be closed by an ordinary pad, we prefer one of the better grades of elastic truss. Should the hernia be of unusual size, filling the inguinal canal and threatening the external abdominal ring, or if it has already progressed to the stage of scrotal hernia, we endeavor to sell the special pad designed for scrotal hernias. This pad is also used exclusively by me for direct inguinal hernia as I find the large pad and the padded jock strap to be of inestimable service in retaining the viscus within the abdominal walls. And while the smaller pad may suffice, the larger one is more certain, under all conditions, to give the best results.

We give decided preference to the elastic web truss over any spring truss which makes pressure over the course of the sciatic nerve. The reason for this lies in the fact that pressure impairs nutrition with the result that the nerve is not nourished sufficiently to properly withstand the effects of exposure to cold and wet, thus giving rise to inflammation or "sciatica" in wearers of trusses. The elastic truss then is best for riders, drivers, farmers and those of sedentary habits who require the maximum amount of comfort.

Spring trusses with hard-rubber pads are desirable for acid workers, smelter employees, street-car workers, and men in similar vocations. Well fitted, they give all-round satisfaction and outlast the elastic truss.

Extreme caution should be exercised to see that all hernias are reduced before trusses are fitted.

ADVERTISING TRUSSES.

For advertising we use first of all our windows, the druggist's best advertising medium. Next I should mention show-case exhibits and counter wrappers. Once in a while an ad. in the local paper is desirable with such phrases as "Trusses accurately fitted," and "We guarantee our trusses to give satisfaction when properly fitted."

As to prices we get from one dollar and fifty cents to seven dollars, depending on the truss and whether we actually fit it. I have refrained from mentioning any manufacturer's name but will gladly give any information desired. We have built up a nice business in this profitable line and feel that the time was well spent.

A "SOUVENIR OPENING" AS A TRADE-WINNER.

By JAMES A. REID,
Laconia, N. H.

To increase one's business fivefold in five years, by the simple expedient of holding a "souvenir opening" on the first Saturday in April each year, is the remarkable achievement of Geo. A. Quimby, known as the "Yellow Front" druggist of Laconia, N. H.

Some ten years ago Mr. Quimby bought a run-down drug store in Laconia, a town of 10,000 inhabitants. To-day, due to his enterprise, it is considered the best equipped and most successful store in the city.

Price cutting or other unfair methods have

gentlemen receive a sample bottle, 10-cent size, of Welch's Grape Juice. Root beer is served free at the soda fountain. In the evening I have an orchestra play, and this feature certainly draws a crowd both into and around the store.

"Over 3000 people came into the store on Saturday, April 6, 1912. Almost every one made a purchase. Thus the increased expenses of the day were small owing to the increased sales. At the same time I noted many new faces and had a pleasant chat with many old



Mr. Quimby's window decorated for his annual souvenir opening day.

played no part in Mr. Quimby's legitimate success. He says:

"I have worked on the theory that if I could once get the people into my store, I would stand a good chance of having them come back again. With this object in view, I inaugurated my opening souvenir day.

"In preparation for this day, I have made up a number of 'gift packages,' which contain free samples of soap, perfumery, etc., which are supplied by the manufacturers. I also put in a supply of carnations, one of which I give to every lady who comes into the store. The

residents who had never been in my store before.

"I believe the time to advertise is all the time! Putting this maxim into practice I use the local papers continuously. I mail a monthly bulletin to old and prospective customers under a red stamp. My show windows are never neglected and my yellow sign boards may be read for many miles along the State highway. This advertising is sure to attract newcomers to my store.

"To hold this new trade I provide plenty of carefully chosen clerks, which insures prompt

and courteous service, and I maintain a large, fresh stock at all times."

Any druggist in a small town cannot do better than adopt Mr. Quimby's methods. A short time ago he was a clerk in a small store.

He now owns a large store of his own, a fine residence, an automobile, and a motor boat—everything in fact which marks the successful and prosperous business man.

His methods have made good.

WHAT THE A. PH. A. STANDS FOR.*

The One Broad Association which Represents Pharmacy in All its Branches—Its Sixty Years of Reform Work in Education, Organization, and Legislation—What it has Sought to do in the Past, and What it Seeks to do in the Future.

By JAMES H. BEAL,

**General Secretary of the American Pharmaceutical Association
and Editor of the official Journal.**

Mr. President, Ladies and Gentlemen: It is my pleasant privilege to bring to you the greetings and good wishes of the American Pharmaceutical Association.

Ours is the oldest, and I believe yours is the next oldest, national organization in American pharmacy, and during the many years of their contemporaneous existence the relations between the two societies have been mutually cordial and mutually beneficial.

Your society has for its chief end the advancement of the interests of that branch of the drug trade which gathers its supplies in a large way from the many original sources of production and again distributes them in innumerable directions to those immediately concerned in their final delivery to the ultimate consumer.

To a considerable degree you supply the capital which enables the original producer to manufacture in large and economical quantities, while for the retailer you furnish an immediate source of supply for the thousands of items which he could otherwise obtain only at greatly multiplied inconvenience and expense. The business of the wholesaler is a proper and necessary one, and if carried on with due regard for the welfare of the retailer who acts as the last link in the chain of distribution, is a wholesome function that makes for economy and speed in the supply of those agents which are required for the alleviation of disease.

*An address read before the thirty-eighth annual convention of the National Wholesale Druggists' Association, held in Milwaukee, Wis., October, 1912.

THE CENTRAL IDEA OF THE A. PH. A.

While yours is an association that seeks the good of a special division of the drug trade, ours is one that strives to advance the interests of all who are engaged in any line of pharmaceutical work. The American Pharmaceutical Association recognizes pharmacy as a whole, as an aggregate of closely associated employments, and it aims to represent the collective interests of this aggregate.

This is its central idea, and the excuse and reason for its existence—the recognition of pharmacy in its entirety as one of the grand divisions of human activity.

The special organizations of pharmacy exist—and properly so—to conserve the special interests of the respective branches of the trade from which they derive their membership. The American Pharmaceutical Association exists to conserve the common interest, and to afford representation to every division of pharmacy and to every individual engaged in any branch of pharmaceutical work.

When a man comes to the A. Ph. A. he is not asked whether he is manufacturer, wholesaler, teacher or retailer, whether he is employer or employee. It is the value of what he has to say and not his commercial rating that determines the character of his reception. If the message is a valuable one it will be listened to as readily when it comes from the humblest member of the household of pharmacy as if it came from the head of the largest manufacturing establishment.

The American Pharmaceutical Association

believes that the interests of the several branches of the drug trade are so interrelated and so interwoven with each other that whatever operates to the advantage or disadvantage of one will ultimately operate to the advantage or disadvantage of all. While it concedes that the several branches of pharmacy have special interests of their own, it does not admit that the true conservation of these interests requires or justifies the invasion or destruction of the just rights of the allied branches. It believes that when any one division of the drug trade deliberately and selfishly seeks its own advantage at the expense of the just rights of the others it will provoke such reprisals from the branches discriminated against as will more than offset the temporary profit arising out of the unfair practice. The A. Ph. A. stands squarely upon the general proposition that the condition for which all should strive should be such an adjustment of trade and professional relations as would bring a due proportion of prosperity and a fair measure of reward to every honestly conducted drug enterprise. In short, it stands for that policy which is best calculated to bring the greatest measure of honestly and fairly gained prosperity to every individual connected with any and every branch of the legitimate drug trade.

THE A. PH. A. PROGRAMME OF PROGRESS AND REFORM.

The A. Ph. A. is an ethical organization and stands uncompromisingly for the conduct of the drug trade upon a high moral plane. Its first meeting at the New York College of Pharmacy, in 1851, was called for the consideration of legislation designed to restrict the adulteration of drugs and to demand the better enforcement of the Federal law against the importation and sale of spurious or inferior articles of materia medica. This was the first organized movement in this country against the misbranding and sophistication of drugs and medicines, and the association has ever since been in the forefront of the movement which culminated in the Food and Drugs Act of 1906, and in similar acts in the various States.

Thus the first great plank in the A. Ph. A. platform was legislation and its efficient enforcement—not legislation which meant merely increased profits to the pharmacist, but legislation for the general public good.

At its second meeting in 1852 it added the subjects of education and organization to its programme of reform, and in the advocacy of these it was and has been as unselfish as it has been in its attitude toward legislation. It has sought the benefit of all rather than the special profit of a single class of individuals. Although the earlier meetings consisted largely of men connected with the colleges of pharmacy, the association adopted resolutions urging the creation of other colleges in cities where they could be properly supported. Neither has it sought to draw all pharmacists into its own membership, but rather to promote the organization of pharmacists as a general plan of progress, and has constantly urged the establishment of associations in every city and State, and it is largely as a result of this policy that practically every political division of the country and every branch of pharmacy now has its own representative society.

Thus for more than 60 years the key-note of A. Ph. A. activity has been education, organization and legislation—not in a selfish, narrow and small way, but for the general good of the whole of pharmacy, and for the general good of humanity.

It is upon these broad and liberal lines that it expects the cordial support alike of the manufacturing and wholesale pharmacist, of the retailer and his employee, of the educator and the members of the boards of pharmacy, and of every one connected with the business of supplying medicinal agents. And it believes also that its broad and humanitarian policy entitles it to the respect and gratitude of the medical profession and of the American public.

THE A. PH. A. BOTH PROGRESSIVE AND CONSERVATIVE.

In its attitude toward reformatory measures it has been at once both progressive and conservative. It has been progressive enough to grant a full and impartial hearing to new doctrines, but it has been conservative enough to refuse them indorsement until their value has been plain. It is willing that new things shall be proposed and tested, but it insists upon holding fast to that which has been proved to be good.

If I have interpreted the spirit of its policy aright it is to the effect that improvement in pharmacy must come through slow and pa-

tient evolution—evolution guided by careful thought and foresight—and not through sudden and drastic revolution.

This attitude has at times brought criticism from those who have been anxious to commit the association to the support of some lately invented panacea for pharmaceutical ills, but subsequent results have usually shown that the association was wise in its conservatism, and prudent in refusing to be stampeded in favor of more or less revolutionary policies. Most of the doctrines to which it has refused its assent are now known only to those who are curious in historical matters, while those which have had its approval are still active and vital elements in the accepted programme of progress and reform.

THE ETHICAL ATTITUDE OF THE A. PH. A.

The A. Ph. A. has sometimes been reproached for being hyper-ethical, and as preferring ethical ideals to the commercial prosperity of the druggist.

This assertion, in so far as it constitutes a charge that the A. Ph. A. has always preferred the good name of pharmacy to the profit that might be gained at the sacrifice of principle, is correct. It is this that has led the association throughout its existence to demand without ceasing the enactment and enforcement of comprehensive and efficient laws against adulteration and misbranding, and for greater restrictions in the sale and use of poisonous and habit-forming drugs. It is this which has inspired its struggle, in the face of strong opposition, for the higher education of pharmacists, and for the surrounding of the practice of pharmacy with restrictions that will efficiently safeguard the public welfare. It is this which has inspired its opposition to fraud and quackery in medicine, and its 60 years of propaganda for rational and ethical prescribing and compounding.

It was charged with being hyper-ethical in its constant protest against the excessive multiplication of proprietary medicines and against the flood of new and unproved synthetic preparations, but it has lived to see the day when this once derided doctrine is being invoked to save both pharmacy and medicine from the Frankenstein monster which unbridled commercialism developed.

It pleads guilty to being ethical and to holding high ideals of professional dignity and

honor, but it does not admit the charge of being visionary and impractical. It is not true that the A. Ph. A. has been opposed to the exercise of sound commercial prudence in the drug business, or that it does not have a sincere concern for the business prosperity of the retail druggist, and from its foundation it has labored for the development and exercise of better business methods on the part of those engaged in this branch of pharmacy. The great majority of its members are directly engaged in the dispensing of drugs in a retail way, either as proprietors or as employees, and it recognizes the plain fact that under existing conditions it is necessary for the druggist to deal in many things not described in the Pharmacopoeia, and not a part of the *materia medica*. It does not reproach him for handling side-lines, and for other things that he must do in order to adjust his business to commercial conditions over which he has no control, but it does insist that whether the pharmaceutical end of the drug store be large or small it shall be conducted along clean and honest lines, and it also insists that ethical pharmacy is the essential nucleus around which the drug business, whether manufacturing, wholesale or retail, shall be built.

It admits and even defends the right of the druggist to supply the ready-made medicines for which there is a popular demand, but it contends that he should not stultify himself by countenancing those that he has reason to believe are fraudulent or contain poisonous or habit-forming drugs in dangerous amount, and it protests against the folly of inviting the support of the physician and at the same time competing with him by counter-prescribing and the active exploitation of remedies concerning the effects of which he knows little or nothing.

It stands for a degree of professional and technical education on the part of the dispenser of medicines that shall be commensurate with the importance of that function. It stands for as high a code of ethics in commercial transactions as in professional, and it believes that no business policy is sound that does not square with the honor of a gentleman and the duty of a good citizen.

It contends that these are not visionary and impractical doctrines, but doctrines dictated by truly enlightened self-interest, and that phar-

macy will render itself the best service by adhering to them.

THE COMMON INTEREST IN LEGISLATION.

Nowhere is the common interest of all branches of pharmacy more plainly apparent than in matters of legislation, both State and national.

While my work has been more closely allied to the retail branch of pharmacy than to any other, I cannot conceive of any species of general legislation affecting the sale of drugs or admission to the practice of pharmacy that is not of material concern to all. The final result of its enactment will be either a benefit or a detriment to all, and our united efforts should, therefore, be exerted for or against it.

We have a common interest in seeking legislation that will best promote the development of our art and best protect the public against the sale of inferior drugs and fraudulent nostrums, and we have an equally common interest in defeating the measures proposed by grafting legislators, or by well-meaning but ill-informed reformers, which would seriously hamper or even destroy legitimate business without reaching the abuses at which they are aimed.

If the latter class of measures would effectually control the sale of fraudulent nostrums and habit-forming drugs we might well afford to submit to considerable inconvenience for the sake of the general good, but knowing as we do that a large proportion of this business is carried on entirely outside of the recognized drug trade, and knowing also that such laws would needlessly hamper the necessary and honest traffic in important drugs without in the least controlling the illegitimate traffic they are intended to restrain, then self-respect and common prudence demand that we should present a united opposition to them.

But our policy must not be one of mere negation. While opposing improperly drafted and ill-advised legislation, we must be prepared to urge the enactment of that which will be truly restrictive, without being destructive to legitimate business interests.

Our policy must be constructive, it must be aggressive, and it must show beyond cavil that the legitimate drug interests of this country are sincere in their efforts to properly control the traffic in fraudulent or dangerous nostrums, and the improper sale of habit-forming drugs.

THE PROPOSED LEGISLATIVE CONFERENCE.

It was this thought that led the A. Ph. A. at its sixtieth annual convention, held at Denver in August last, to adopt a series of resolutions calling for a general legislative conference in the following terms:

"(1) That this association hereby calls a conference to be made up of delegates from the various national pharmaceutical associations to consider the subject of legislation, both State and national, in its relation to pharmacy.

"(2) That the general secretary is instructed to send invitations to each of the national associations requesting the appointment of delegates to such conference.

"(3) That such conference shall be held at Washington, D. C., some time prior to January 1, 1913.

"(4) That the temporary chairman of the conference shall be appointed by the president of the American Pharmaceutical Association, and the general secretary shall act as temporary secretary of the same.

"(5) That such conference shall elect its own permanent officers, and after its organization shall be considered as representing all of the associations sending delegates to the same, and shall not be considered as being conducted under the auspices of any particular organization."

In taking the initiative in calling this conference our association was not actuated by any narrow desire to claim precedence among other national organizations, but acted by virtue of the fact that its membership includes representatives from every branch of pharmacy, and from every political division of the United States and its foreign possessions, and by the further fact that during all the years of its existence it has constantly striven for adequate legislation regulating the sale of drugs and the practice of pharmacy.

The terms of the resolutions make it plain that the A. Ph. A. does not seek to dominate the conference, and that after it has been called to order by its temporary chairman the conference will become the master of its own destinies, and will not be regarded as representing any one division of organized pharmacy more than another.

It is our expectation and our desire that your association will be represented in that

conference by those who will be able to give it wise and prudent counsel.

THE DUTY OF PHARMACY TO THE A. PH. A.

Formerly I urged pharmacists to become members of the A. Ph. A. because of the personal advantage of membership, but, although the value of membership is greater than ever before, I now urge them mainly upon the ground of their duty to the calling which affords them a livelihood, and of their duty to the society that for more than three score years has been the conservator of the best traditions of pharmacy and an ardent champion of its rights.

Upon the same grounds I present it as your duty as individuals to become members of our

association, and thus strengthen its hands in the efforts to realize its ideals, and show that you, too, are in sympathy with its work for clean and honest pharmacy, and willing to contribute toward its attainment. I believe that it is also your duty to see that the members of your respective scientific staffs become members and contribute to its proceedings and to the columns of its official organ, a publication that does not enter the field of the independent drug journals, and that endeavors to represent the principles for which the association stands by accepting advertisements for only strictly ethical remedies, and by preserving an even balance of judgment and standing for fair play and justice between all divisions of the drug trade.

RULES FOR DRUG CLERKS.

By O. P. McPHERSON,
Gloster, Miss.

I have impressed certain rules upon all of my drug clerks. Since a number of other druggists have asked me for them, I submit them for publication. They may apply somewhat to clerks in other stores as well as employees in the pharmacy.

1. Pay your clerk all the business will warrant.

2. Let him know in the beginning that he is to WORK.

3. He must be a boy of good habits.

4. He must be honest and polite.

5. He must open the store at a reasonably early hour and have a regular hour to do it.

6. He must keep the store open reasonably late, and have a regular hour to close.

7. After opening the store, the first duty is to dust the counter and desks and then sweep the floor.

8. See that all books and papers are in order on the desk. Never destroy papers left thereon by the proprietor unless so ordered.

9. Never leave circulars, almanacs, etc., scattered on the counter. Have a place for them where it will be convenient to hand them out to the trade.

10. Never make a sale without giving out some of the advertising of the store.

11. Never give any one customer too much

advertising of any kind. If he be a man give him such literature as will interest a man; if a woman, give her ads. of toilet articles, poultry, cook-books, etc. Always note the results.

12. Always help the proprietor keep an accurate mailing list, or keep it yourself. If you haven't one, make one.

13. Never leave funeral notices on the counter more than one day.

14. Never say "I" can't sell you goods at cost, or "I" have certain goods ordered, but say "we" can't or have.

15. Always endeavor to be humble and polite to all the trade; have plenty to say, but never talk too much.

16. Never speak impudently or get fresh to men older than yourself.

17. Never whistle, wrestle, whittle, or talk boisterously in the store.

18. Never entertain loafers in the store, but do not insult them. Simply have your work to do and keep on doing it.

19. Never wait on a lady with your hat on. It is best not to wear it at all in the store.

20. Never play tricks with drugs, or joke about medicine.

21. Never loan another your store keys. Always go with them.

22. Never idle away your time, or rather

your employer's time. Be as honest with it as you are with his money.

23. Never attend entertainments without telling your employer where you will or can be found. Don't attend too many at any rate.

24. Don't dress beyond your income, nor indulge in buggy rides.

25. Never play checkers or games of any kind in the store. Steer clear of baseball games. Don't get the habit.

26. Never ask for a raise in your salary. Nor quit a reasonably good job that is permanent for a better paying position that is uncertain.

27. Never attempt to fill a prescription unless you are the prescription man.

28. Never leave the store for anything unless you notify the proprietor and other clerks.

29. Never refuse to obey a reasonable order given by a superior clerk of the house.

30. Never loan money, pay freight, or any other bills without authority from your superiors.

31. If goods are to be charged, stop and charge them; if a credit is to be made, stop then and there and make it.

32. Never give a wholesale order without instructions. Never open mail that belongs to the store.

33. Never open an account without instructions from the proprietor.

34. Study your stock closely and know where everything belongs. Never keep a customer waiting on account of your ignorance.

35. Never sell anything unless you are sure you know what you are doing.

36. Watch your show windows and cases and keep them attractive. Change them once a week.

37. Study methods of business men, and don't forget you are learning and don't know it all.

38. Let any boy follow these rules as near as possible and see how quickly his salary will jump right along from \$15.00 a month to \$75.00.

How the Druggist's Sundries Are Made.

SEVENTH PAPER: CORKS.

A Large Industry—The Importation is Over Five Million Dollars Annually—The Different Steps in the Manufacturing Process from the Stripping of the Trees to the Production of the Finished Stoppers.

By OTTO RAUBENHEIMER, Ph.G.*

A paper on cork may seem trivial to many, but I have been prompted to write one for the following two reasons:

1. The average pharmacist, who uses corks daily and considerably, has but very little knowledge of the source and manufacture of that necessary commodity.

2. The books in English, especially those available to the pharmacist, *i.e.*, works on pharmacy and botany, and also the dispensaries, have little or nothing to say as to the history, origin, and manufacture of cork. Through an introduction to the owners of one of our large cork factories in Brooklyn I had the good fortune of visiting their plant in

operation, thus obtaining a great deal of practical knowledge.

SOURCE AND HABITAT.

Cork is derived commercially from the cork oak, principally from *Quercus suber* L., an evergreen tree, and to a smaller extent from *Quercus occidentalis* Gay, which loses its leaves yearly, as already described by Theophrastus. The trees are usually from 20 to 40 and sometimes 60 feet high, and measure 3 to 5 feet in diameter and attain an age of about 2000 years. The wide-spreading branches are generally thinly covered with small leaves, which are thick, glossy, slightly serrated, and downy underneath. The tree flowers during April or May and the yellowish flowers are succeeded by small acorns, which when fed to pigs give their meat a peculiar

*Read and demonstrated with specimens at a joint meeting of the New York Branch of the A. Ph. A. and the Kings County Pharmaceutical Society. Printed in the *Journal of the A. Ph. A.*

piquant flavor, which has given a reputation to the Spanish mountain hams.

The cork oak is a native of the countries bordering on the Mediterranean Sea, especially Spain, Portugal, Algeria, and Morocco. It requires a temperature of 13° C., and does not thrive beyond 45 degrees latitude. The cork producing territory covers practically all of Portugal and part of Spain, namely, Andalusia and Estremadura in the South and Catalonia in the North. The total area covered by cork forests is estimated at about five million acres, and the annual production of cork wood is said to be about fifty thousand tons. Some of the very best bark is made into corks in Portugal and Spain, especially in Catalonia, but most of it is exported



Otto Raubenheimer.

as corkwood to the United States, England, Germany, Austria, etc. The principal shipping port is Seville. France obtains a great deal of corkwood from Algeria.

CULTIVATION OF THE CORK OAK.

The preservation and cultivation of the cork trees has been attempted and practiced for some time, especially in the southern part of France and Algeria. As early as 1859 a French work was written by Rousset: "Culture, exploitation et management du chêne-liège en France et en Algérie." The United States government in 1858 distributed seedlings, and I am informed that in the southern and south-

western section, cork oaks are now growing which in time will furnish cork.

The bark of the cork oak is covered with an epidermis up to its third year, which then bursts lengthwise owing to the growth of the corky layer underneath. The formation of the cork or dead cells or peridermis is done by the inner layer, the cambium, and continues regularly. When the tree is about fifteen to twenty years old it has a diameter of about five inches, or to be more correct, measures forty centimeters, according to the Spanish government regulations; then the so-called male cork or virgin cork is removed for the first time. This is of very little commercial value, being rough and coarse in texture. The removal of this virgin cork, however, promotes the further development of cork, because the inner bark, or cambium, the so-called mother-cork, undertakes at once the formation of a new covering of much finer texture and elasticity. The cambium with its life-giving sap forms two layers of cells each year, one within, which increases the diameter of the trunk, and the other without, which adds thickness to the cork. In about eight to ten years the cork layer becomes about 17 to 26 mm. thick and is then removed. This so-called female cork is more valuable than the virgin cork, but is not as fine in quality as the third and subsequent strippings, which follow at regular intervals of eight to ten years. The cork oak furnishes the very best quality of cork at the age of fifty to one hundred years; when the tree becomes 150 years old the quality of the cork gets poorer.

COLLECTION OF CORK.

This is performed by stripping it off the tree, using great care not to injure the cambium, in which case a reddish liquid will ooze out and no more cork will be formed at that part of the tree. The peeling is done from May to August in Algeria and during July and August in Spain and Portugal. The French in Algeria sometimes use saws, but the Spaniards employ hatchets with long, wedge-shaped handles. The bark is cut around the trunk and the branches in several parallel places, and the two incisions are then connected by several longitudinal cuts, following as much as possible the deepest of the natural cracks in the bark. By inserting the wedge-shaped handle of the hatchet, the cork

is then detached. The thickness of the bark is from one-half to two and one-half inches, and the yield varies, according to the size and age of the tree, from fifty to five hundred pounds. The gathered bark is next removed to the stations, where it is put into boiling water in order to soften the cork so the outer bark can be scraped off. This process reduces the weight of the cork almost 20 per cent. The boiling also extracts the tannic acid and increases the volume about 30 per cent. Being now soft and pliable, the bark is flattened and is packed and pressed into bales bound securely with steel bands.

These bales weigh uniformly 106 kilos, or about 224 pounds, so ten of them make an English gross ton.

MANUFACTURE OF CORKS.

Corks in olden times were of course made by hand, using a very sharp knife. This method is still practiced to some extent in Spain and Portugal. In fact the very best corks, *e.g.*, champagne corks, are entirely cut by hand. It is said that owing to their unevenness, *i.e.*, on account of not being exactly round, they make much better stoppers.

SORTING OF THE CORKWOOD.

The first step is the sorting of the corkwood, for although every bale is stamped A, B, C, D, etc., according to its quality, it is again assorted. It must be remembered that the thickness of the bark determines the maximum diameter, not the length of the cork, as the *cutting is done across and not with the grain*.

STEAMING.

As the corkwood is very dry and brittle after its long journey and storing, it is necessary to soften it so as to make it workable. This is done in large covered vats by means of steam. The steaming process makes the corkwood flexible and also slightly increases its bulk, and especially prepares it to undergo the following mechanical operations:

SLICING.

By means of a special machine, a slicer with razor-like circular steel knives making hundreds of revolutions every minute, the softened bark is cut into strips, according to the desired length of the cork. It can then

be seen that the thickness of the bark determines the maximum width of the finished cork and that the width of the strips represents the length of the cork.

PUNCHING.

From these slices, by means of a blocking or punching machine, the straight or cylindrical corks are cut out. This is quite a dangerous operation and many a workman, who has to guide the strips to be punched, has lost one of his fingers.

TAPERED CORKS.

These processes, as we have seen, produce the straight corks. The corks used in pharmacy are the tapered kind. These are manufactured from the "straight" variety by passing them through a machine which by means of a very sharp circular knife "tapers" the corks.

POLISHING.

In order to produce a very smooth cork, they are polished by rapidly rotating emery wheels.

BLEACHING AND WASHING.

To clean the corks, which of course have become soiled through these mechanical operations, and in order to give them the white appearance instead of the reddish color of the natural corkwood, they are bleached and washed. This is done in very large vats, the first bath containing a weak solution of chlorinated lime, the second one of oxalic acid. The corks are then rinsed in hot water and dried by whirling in large revolving cylinders of galvanized wire netting. This quick drying is a necessity, as in slow drying the corks might develop a mold.

GRADING AND ASSORTING.

The last and perhaps most important step is the grading and assorting of the corks. This is done by girls, who in time become expert in this work, which they perform with such rapidity as to assort 20,000 corks during one day's labor.

STORING.

The proper storing of corks is of great importance. They should be kept not too dry nor too damp, as in the former case they become brittle and in the latter they get moldy.

In my own experience I have found the best way to keep the stock in the cellar but not directly on the cellar floor. For the corks in the store I keep a moistened piece of blotting-paper in each compartment. This will supply the necessary moisture and saves me a good deal of annoyance by "breaking off" when putting corks into bottles.

PACKING.

As is well known to every pharmacist, the corks are placed in five-gross bags. The slow counting has been replaced by the quicker weighing, the weight of each five gross of the different lengths and grades being known to the manufacturer.

SCALE OF DIAMETER OF CORKS.

There is no special rule as to the length of the corks, which are usually graded as short, regular, long, and extra long. But there is a standard for the diameter of corks, the U. S. Standard. The corks are measured at the upper or larger end, and a cork with a diameter of 1 inch is called No. 10. The difference in each size is $1/16$ of an inch. No. 9 measures $15/16$ inch diameter, No. 8 measures $14/16 = 7/8$, etc.

FANCY CORKS.

There are corks which are branded on the side or have initials or monogram on top. Some are made with a polished wooden top, others with aluminum top. There are also corks provided with a rubber covering in place of the more expensive rubber stoppers. Corks having a camel's-hair brush inserted, as for corn cure, might also be enumerated in this category.

OTHER CORKS.

Besides the tapered prescription corks used by pharmacists, there are a great many other varieties—*i.e.*, the straight corks from the finest quality champagne corks down to the common soda-water cork; flat corks for wide-mouth bottles or jars, the so-called specie cork; shell corks with a perforated center, generally used with a sprinkler-top; disks—these are very largely used as a lining for metal bottle caps. The cork is sliced or split by very sharp circular saws, and from these flat pieces, about $1/9$ inch thick, the disks are stamped out.

PARAFFINED CORKS AND OTHER ARTICLES.

Paraffined corks are prepared by rotating the dry corks in large hot drums with just sufficient melted paraffin to be absorbed. Through the rotating these corks are polished at the same time. Paraffined corks could with advantage be used much more than they are at present; they are especially useful for acid and also alkaline liquids. It may perhaps be not generally known that the reason the corks of some of the proprietary preparations, as milk of magnesia or milk of bismuth, are not attacked is because they are paraffined. I have some corks here which have been in contact with magma magnesiae for over one year.

The discoloration of ordinary cork as well as the discoloration of the milk of magnesia can easily be explained, as the suberin in the cork is saponified by alkalis.

OTHER ARTICLES FROM CORK.

Among the numerous other articles manufactured from cork, life preservers are perhaps the most important. According to the U. S. regulations they must not weigh over seven pounds.

Other articles are ring buoys, mooring and anchoring buoys, yacht fenders, seine corks for fishing-nets, insoles and soles for shoes, floats for plasterers, wheels for polishing glass, balls to be used at seashore, artificial limbs, and a great many smaller articles, as bobbars for fishing-lines, handles for fishing-rods, bicycles and pyrographic instruments, tips for penholders, strips for eye-glasses, etc., etc.

The waste in a cork factory is tremendous, amounting to about 60 per cent. All of this waste is saved, even the dust at the various machines, which by powerful air suction is carried away by pipes. The waste is ground or powdered and utilized to manufacture linoleum, together with linseed oil, floor tiling, cork cardboard, etc.

The importation of cork into the United States amounts to over five million dollars annually. There is no duty on the corkwood, but 30 per cent ad valorem for manufactured material. The duty on cork stoppers up to three-fourths inch in diameter is 25 cents per pound, and above that 15 cents per pound.

LETTERS

This is where our readers exchange opinions and practical suggestions with one another. The Editors are always glad to receive short letters on subjects of mutual interest.

MAKING COLLECTIONS IN MEXICO.

To the Editors:

I notice that P. L. Gain of East St. Louis, Ill., in an article contributed to the *Era* on the subject of cash versus credit, favors a cash business.

It happens that we in Mexico are peculiarly situated. We are surrounded by people who pay their bills although they do not enjoy that reputation. In ten years our losses have averaged only one-tenth of one per cent. We have a system that seems to bring the desired results. At the end of the month we make out statements. These, by the way, are so printed that when they are folded in a transparent envelope, the name and address are visible through the wax paper.

Statements are mailed to customers at the end of each month. But we go over the books again on the 15th of the month following, and where we find a customer has not paid his bill on the first, we send him another statement made out on a special blank for the purpose. We thus advise the customer that his balance for the month before, amounting to a sum which we never fail to mention, has not received his attention and we solicit a remittance.

With a little tact we can make people pay their bills. For example, if the account is one of long standing and we are unable to get a reply from the delinquent, we make up a statement of his account omitting his last payment, no matter how far back that may have been. He generally comes into the store then mad as can be, but always gives our communication some attention. If he lives out of town, he will write, thus acknowledging the indebtedness, which acknowledgment will be of service in court proceedings.

Again, if the delinquent is a grocer who lives in a small town, we draw on him through one of his competitors, giving the latter power to close our customer's place of business if he refuses to pay. Since grocers are at loggerheads, this procedure usually brings us our money.

I feel that the small loss entailed by the credit system is insignificant compared with the increase in business that it brings us.

We have a well-organized delivery system and encourage orders by telephone. Furthermore we discourage our customers from paying our delivery boys unless the slip accompanying the package reads C. O. D. Less than 10 per cent of our business is done in English, nearly all of it being done in Spanish.

I believe that if druggists will adopt the proper systems and care for their accounts, they will feel universally that, regardless of nationality, it is the desire of all people to pay their debts. My advice is, use strategy if possible; if not use force, and the desired results will be secured.

MILTON A. WARNER.

Torreón, Coah., Mexico.

FROM AN AUSTRALIAN READER.

To the Editors:

I'm very pleased with the July number of the *BULLETIN*, just received. May I take you into my confidence and tell you why? Because its information is just as useful out here as in your country. I may say, however, that I get a little tired each month to open up and find something about the N. A. R. D. But it is no doubt interesting to American readers. The article on optics, bearing the caption "My Best Paying Side-line," and another entitled "Operating a Soda Fountain," are very informing and are full of horse sense.

But, sir, I'd like a little information. You state on page 267 of the July number, under the heading "Anti-narcotic Restrictions," that 200,000 ounces of morphine are sold every year in Kentucky alone, and apparently laudanum and cocaine are freely sold also. Out here it is hard to get any of these drugs from the chemists. Are there not poison laws in your country?

I have been reading the "lay" of the Chemists' Assistants' Union of this state. As you are no doubt aware, our conditions are regulated by an award of the Arbitration Court, which is enforced by the government. Our conditions are much better than under the old system of taking what the employer was willing to give us. We expect shortly to have pharmacies closed at 6 or 7 P.M. Won't that be all right?

I wish success to your journal and hope

that you will continue to include articles interesting to Australians as well as Yanks.

Coogee, Sydney, N. S. W.

A. C. DASH.

REGARDING THE SALE OF LIQUOR.

To the Editors:

You have always held in the BULLETIN that a physician's prescription is in itself not necessarily a legal defense for the druggist in the sale of liquor. Your position is, as I understand it, that a prescription must be written in good faith in order to protect the druggist, and that the druggist must know it was so written. I shall always agree with you in your contention, and so will every conscientious judge. Four druggists in a town of this State were last summer accused of violating the local option law. All had to pay fines, and one of them was sent up for thirty days. They were not accused, however, of selling liquor on prescriptions. They sold it in the customary way for "medicinal use, etc., etc."

The best thing a druggist can do when his

town goes dry is to throw out the booze. He should even throw out alcohol, and buy his standardized tinctures and other preparations without the necessity of keeping alcohol with which to make them. As long as a druggist can say honestly that he has neither alcohol nor liquor in stock, he makes no enemies by refusing to sell the stuff. On the other hand, however, if people know that he has such things in the store, and if he will not sell it to them, then he gets himself in wrong. Throw out the booze!

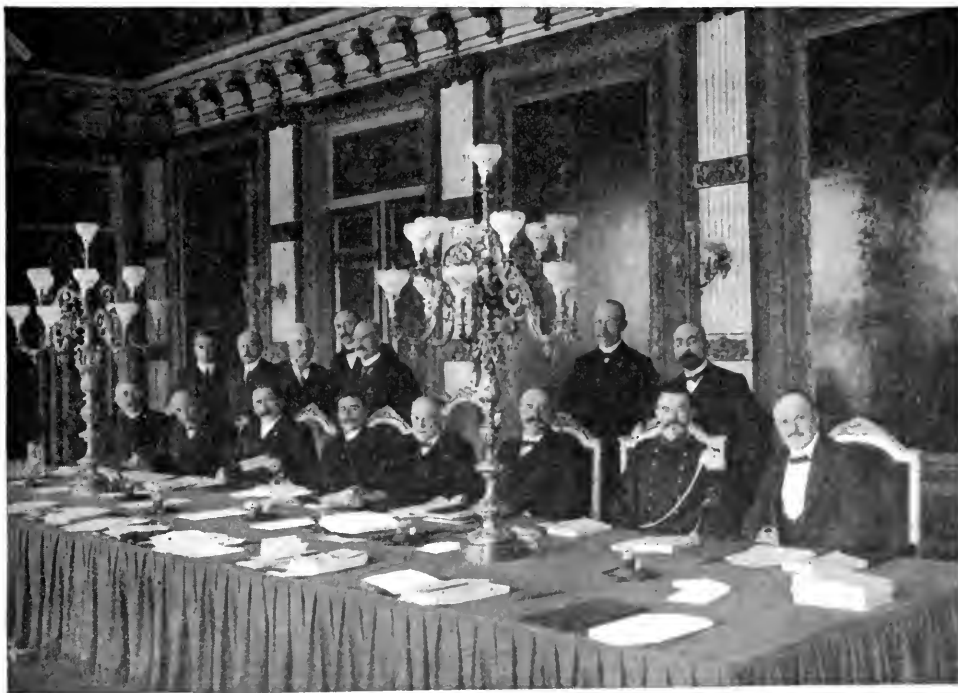
E. E. STEINER.

Lowell, Washington.

PATENTED SYNTHETICS AND THEIR IMITATIONS.

To the Editors:

Here is an addendum to the sulphonal prescription discussed in the department of "Letters" in the last two or three issues of the BULLETIN. The use of the unpatented sulphonmethane at 30 cents an ounce probably accounts for the 25-cent price for the prescrip-



The General Committee of the Eleventh International Congress of Pharmacy.

In this picture are seen the members of the Organization Committee of the eleventh International Congress of Pharmacy, which met at The Hague, Holland, in September. Those seated, from left to right are: Joh. Damen, The Hague, Holland, president of The Hague Branch of the Netherlands Pharmaceutical Society; L. Mouliets, La Teste, France; O. v. Schoor, Antwerp, Belgium; L. v. Itallie, Leyden, Holland, president of the International Congress of Pharmacy; R. J. L. Schoepp, Maastricht, Holland; J. J. Hofman, president of the Netherlands Pharmaceutical Society and member of the Health Commission of The Hague and Secretary of the International Congress of Pharmacy, The Hague; G. R. Ter Burg, Military Pharmacist of the First Class, The Hague; W. Hoffman, Aix-la-Chapelle. The gentlemen standing, from left to right are: E. White, London; M. Martin, Mons, Belgium; V. Haazen, Antwerp, Belgium; Dr. J. F. Suyver, secretary of the Netherlands Pharmaceutical Society, Amsterdam; Professor Doctor H. Thoms, Berlin; H. Moeller, Copenhagen; Dr. Schamelhout, Brussels.

tion given by one contributor. But what shall be done with the Bayer sulphonahol on hand? Should druggists refuse to purchase the original proprietary? I personally prefer high quality to cheap prices. At the same time I meet with some difficulty in my charges, as some of my competitors "bait" my customers with cheap prices. They underprice prescriptions plainly marked with the N. A. R. D. cost mark.

Let me raise the question: Why pay \$4.00 a pound for Ichthyol (Merck's) when Ichthynat. Heyden, can be purchased for \$2.25, or Ichthosulfol for \$1.95? Argyrol costs \$1.50 an ounce, while Argentum Nucleinicum, Heyden, duplicate of Argyrol, is 90 cents an ounce. A long list of other duplicates are quoted to druggists. Is it substitution to use them when sulphonahol, ichthyol, argyrol, etc., are prescribed? If not, why should some druggists purchase the high-priced articles mentioned, others the cheaper imitations offered under their chemical names, and then expect prices to be the same?

I would be grateful for opinions on this subject.

D. A. FRICK.

Audubon, Iowa.

[Have our readers any opinions to express on this important question?—THE EDITORS.]

ANOTHER "QUICK" METHOD OF DISPENSING POWDERS.

To the Editors:

In the "Dollar Idea" section of the November number of the BULLETIN OF PHARMACY I note a "quick" method of dispensing powders used by R. B. Conant. As I always wish to adopt "time-savers" in prescription work I tried his method, and find it requires more time than the one I follow, to wit:

After the powders are divided on the powder tile, slide the tile to the edge of the prescription counter. Lay out the required number of powder papers. Then take one paper in the left hand, put it under the tile, and with the spatula slide the powder off onto it, next transferring powder to one of the papers on the desk, and keeping this process up until all the powders are thus disposed of.

This method is quicker by far than the putty-knife and spatula plan followed by Mr. Conant.

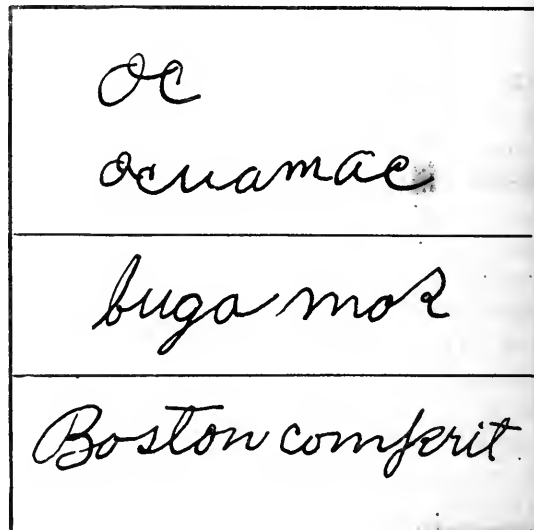
ROBERT BARRY.

Boston, Mass.

THREE GOOD ONES.

To the Editors:

I enclose a few sample puzzlers that we run up against in our work. We are in the very midst of the black belt down here, and we fre-



quently get some interesting written as well as verbal orders from customers. The three articles wanted were nux vomica, oil of bergamot, and balsam copaiba.

W. L. LAMAR.

Union Springs, Alabama.

A REQUEST.

To the Editors:

Would you mind announcing in the BULLETIN that I would like to reciprocate with fellow pharmacists and exchange copies of newspaper advertisements? I can send, for instance, types of ads. used in New York by the Riker people, the Liggett stores, or the department stores.

A. P. SPERO.

266 Jay Street, Brooklyn, N. Y.

To the Editors:

I have read the BULLETIN during all the years that I have been behind the counter in the drug business, and I regard it as head and shoulders above all its contemporaries!

Snyder, Texas.

F. V. CLARK.

* * *

To the Editors:

I could not get along without the BULLETIN. It is the best drug journal published.

Augusta, Ark.

H. G. FOLSOM.

BUSINESS HINTS

Specimens of druggists' advertising are solicited for reproduction or comment in this department of the BULLETIN.

A Cash Business Only.—

J. W. Head, of the McDonnold Drug & Book Company, of Lebanon, Tenn., is a firm believer in conducting a business on a strictly cash basis. He writes that his firm has followed that system for three years and that it works beautifully. Mr. Head says he would like to see other druggists follow suit. The accompanying illustration shows one of the McDonnold ads. clipped

NOTICE!

We wish to advise the public that we are still selling for CASH and we positively will NOT make a charge or a ticket against any one for any length of time, so kindly do not ask us for this favor. We save you money by doing a cash business and appreciate your trade.

Watch for our ad. of Special Toilet Article Sale which will appear in this paper next week.

MCDONNOLD

DRUG AND BOOK CO.

J. W. HEAD

H. T. BURNETT

from the local paper. It indicates how the company impresses upon the people of Lebanon that it sells goods for cash only. Mr. Head adds that he will be glad to discuss the cash system more fully with any druggist who may write him. Meanwhile he would like to know how other dealers are faring who do business for cash only.

A Pretty Strong Advertisement.—

Frank E. Smallidge, of Detroit, is confessedly impatient with modern cut-rate methods, and with the extent to which side-lines are carried in drug stores. He is proud of his establishment, and once in a while he gets out a piece of advertising which certainly hits straight from the shoulder. We are showing this month one side of a recent card of his. It was just the size of a postal, although, unlike the latter, it could not have been sent through the mails except it was en-

closed in an envelope. One side contained an advertising announcement; the other side bore a photograph of the Smallidge building. The photograph was taken



last spring right after a heavy snowstorm, and therefore had a good deal of pictorial value. The announcement on the other side read as follows:

QUALITY ALONE IMPORTANT IN DRUGS, AND THE BEST NEVER TOO GOOD!

Poor drugs sold at auction under the insidious, but very attractive, claim of cut-rate are NOT cheap, have NO value, and ARE dangerous. ASK YOUR DOCTOR. Why not buy your drugs from a real DRUG STORE, where the sale of picture cards and pic are not in direct competition with the prescription department, and where the quality supplied will permit you to live, enjoy life and prosperity long after the price has been forgotten? We offer you the protection of a safe, reliable drug store that has not been commercialized, demoralized, or paralyzed by department store methods.

When you consider that for every good drug made there is also a cheap substitute, do you think a bargain counter is a good place to buy medicine, on which your health and, perhaps, life may depend?

Thanking you for past favors, and soliciting your continued patronage on the merit of the business, I am
FRANK E. SMALLIDGE.

Some of Mr. Bodemann's Advertising.—

Wilhelm Bodemann, of Chicago, believes in advertising his store. We have reproduced specimens of his

YOUR Banker your Attorney, your Doctor, your Dentist—are men in whom you have confidence—men with an established reputation. How about your Druggist?

If you are a newcomer to this section, ask your family physician or some of the old timers—they will tell you to go to the Hyde Park Pioneer Druggist

W. Bodemann

If you telephone your orders call
OAKLAND 561

5018 LAKE AVENUE

You can pay your Gas and Electric Bills at Bodemann's, transact your Postal business at this Substation, leave packages to go by American Express.

publicity matter from time to time, and we are showing another one this month. It is in the form of an envelope enclosure, and is evidently used also at the counter.

"Rendering Unto Caesar the Things That Are Caesar's."—

On page 480 of this department for November we reproduced the photograph of a very attractive perfumery window which had been sent to us some time before, but the authorship of which had been lost. We presented the child for inspection and offered to acknowledge its parents when they introduced themselves. We now find that the photograph was sent to us by A. Campbell, of the Central Drug Store, 2d Avenue, Saskatoon, Saskatchewan, Canada. It was used as an Easter display last year. Our thanks to Mr. Campbell—and our congratulations also on his good taste in window dressing!

CAPSULES OF SCIENCE

Prepared by PROF. W. L. SCOVILLE.

Condensed Conclusions.—

Watermelons contain about 47 per cent rind, 10 per cent pulp, and 43 per cent juice, and the last contains about 6.5 per cent of sugars.

The addition of 1 per cent of borax or of sodium hydroxide to corn-starch increases the viscosity of the paste, but large quantities of either decrease it.

A German chemist claims that sodium arsenite, if pure, is not oxidized in the air, but that if it contains sulphur or carbon dioxide, oxidation will take place in the air.

Caffeine and isotropine both form chemical compounds with chloral hydrate, which are broken up in boiling water.

Adrenalin can be made from the glands of cattle, hogs, sheep, or whales, or from the skin of certain toads. Adrenalin from whales is the latest to be studied.

Professor Ostwald says that changes in the color of dye solutions by acids and alkalies are due in part to changes in the colloidal conditions of the solution.

Glycerin is decomposed by ultraviolet light rays with formation of formaldehyde, acids, and other products. Hydrogen peroxide increases the rate of decomposition.

Water-gas tar is an effective weed-killer, and prevents the growth of fresh weeds. It is being tried on railroads—3000 gallons to each mile.

Professor Tschirch has identified storax, mastic, aleporesin, asphalt, myrrh, frankincense, and amber in the embalming material of Egyptian mummies.

F. Fillinger finds by experiment that alcoholic drinks cause a decreased resistance of the blood-corpuscles, and consequently a greater liability to disease.

Luminal, a new sedative and hypnotic, is receiving much favor in Germany. It is twice as strong as veronal and is considered safer and better for nervous patients.

G. Delani says that hypophosphites pass through the body unchanged, and if they have any action it must be an indirect action on the economy.

A. C. Houston finds that typhoid germs remain active



TWO A. PH. A. SNAPSHOTS.—Here we have a group of women pharmacists—not wives of pharmacists, but pharmacists themselves. They were snapped at Glacier Lake, and it seems quite evident that Mr. Sass is keenly interested in the subject of women in pharmacy.

longer in ice-cold water than in water at a temperature of the body.

The glass over electric lights, either arc or incandescent, cuts out most of the deleterious rays and prevents injurious effects. Arc lights without glass globes give out enough violet rays to be injurious to the skin as well as to the eyes.

The inventor of cold storage, M. C. Tellier, of Uruguay, is almost penniless, and a fund is being raised for his support. He is now 84 years old, and an example of the genius that benefits others rather than himself.

Dr. Bergins has made artificial coal from cellulose by heating with water, under a pressure of 1500 pounds. The coal produced was of the bituminous variety, but was chemically and physically identical with coal.

Certain varieties of rice starch give a red color with iodine instead of blue. Y. Tanaka thinks that this is due to a lesser absorption power of this starch, since the color is due to an absorption of iodine by the starch, and this variety appears to take up less than others.

M. V. Cruess says that in wine-making a small amount of sulphurous acid checks the development of wild yeasts and vinegar yeasts, without interfering with the normal fermentation. Hence better flavors in wines are insured by the use of sulphurous acid during fermentation.

The rapid increase in the cost of gasoline is forcing experiments to find a substitute in combustion engines. A combination of gasoline and kerosene is giving promise of solving the problem, the combination giving more power at a much less cost.

Anhydrous hydrocyanic acid is explosive, but the cause of this is not understood. The pure acid is something more than explosive, and it isn't safe to be too curious with it.

Uranyl nitrate decomposes at 100° C. into nitric acid and uranyl hydroxide. Uranium has a "rare" behavior, as well as a "rare" classification.

The American Cyanamide Company at Niagara Falls is doubling its capacity, and it has not yet been in operation two years.

Glycerin is oxidized by hydrogen peroxide into formic, glyceric, and glycollic acids, and if the peroxide is in excess the oxidation of the glycerin is complete.



TWO A. PH. A. SNAPSHOTS.—We are indebted to S. K. Sass, of Chicago, for the two pictures shown on this page. In this particular view we have a group photograph of such members of the A. Ph. A. as went to Yellowstone Park after the Denver meeting in August last. The picture was taken at Manitou, Colorado.

A New Depilatory.—

Thallium salts taken internally cause the hair to fall out, producing baldness. R. Sabouraud finds that an external application of the salts acts in the same way, but locally, and he recommends the following ointment as a depilatory:

Thallium acetate	0.30 Gm.
Zinc oxide	2.50 Gm.
Rosewater	5.00 Gm.
Lanolin	5.00 Gm.
Petrolatum	30.00 Gm.

A small pellet of this ointment, no larger than a grain or two of wheat, is applied every night. Too free a use of the ointment is likely to produce poisonous effects.

New Idea About Valerian.—

French physicians—two of them, at least—claim that valerian when fresh is a valuable and powerful sedative and antispasmodic, but that the dried drug is practically inert. In order to avoid the effects of alcohol in connection with this drug, a juice expressed from the fresh drug, prepared without heat and without alcohol, is recommended. This is said to have little odor and to be almost free from valerianic acid. Valerianic acid is stated to be of no value except as a repulsive psychic treatment, while the juice of fresh valerian is not disagreeable and has a genuine sedative and hypnotic action.

Ointment Effects and Affects.—

F. Samland claims that iodine preparations are absorbed from ointments made with petrolatum faster than from similar ointments made with lanolin or lard. Methyl salicylate he finds is only slightly absorbed from lanolin, and more freely from petrolatum. Other salicylates do not act in the same way, some being absorbed more rapidly and completely from lard or lanolin. Absorption of medicaments from ointments is usually slow though prompt, beginning in one to four hours and lasting in some instances three days.

Ipecac in Dysentery.—

Dr. Rogers says that the alkaloids of ipecac are responsible for its influence in tropical dysentery. Emetine and cephaeline are found to destroy the ameba which causes dysentery in dilutions as high as 1 to 100,000, and this accounts for its action. In order to avoid the nausea which is produced by the internal administration, it is being tried hypodermically, salts of emetine or cephaeline being injected in doses of 1-6 to 1-2 grain. The effects upon the disease are very marked, but there is no nausea.

Easy Emulsions.—

A very stable but thin emulsion can be made by pouring a dilute solution of oil in acetone into a large body of water—about a thousand times the volume of oil. Such an emulsion can be boiled to drive out the acetone, and will then keep for years without separating.

Ye Camp Fire.—

Karl Meyer has found that briquettes composed mostly of pressed eucalyptus leaves and pine needles, when burned, give off formic acid in the smoke. The smoke is capable of killing tubercle bacilli even when sufficiently dilute for a man to remain in the room.



Detroit Druggists Entertained by Their Toledo Brethren.

Both Detroit and Toledo have successful and enthusiastic drug clubs. Recently the Detroit Drug Club was entertained by the Toledo organization, and this panoramic picture was taken just as the bunch landed at their destination. Royal entertainment was provided, and the Detroiters told enthusiastic stories upon their return about Toledo hospitality. Special songs were gotten up for the occasion, and a hilarious time was enjoyed from start to finish.

PRACTICAL PHARMACY

Perplexing Pills.—

R. Albro Newton presented a paper before the Section on Practical Pharmacy and Dispensing at the A. Ph. A. meeting in Denver on the subject of difficult pills. It appeared later in the *Journal of the A. Ph. A.*, from which we are pleased to quote in part:

"Veterans are sometimes baffled by the tasks which are set before beginners. Of the many prescriptions used as a test of the ability of students, there is one type which seems fully as bothersome to the dispenser of considerable experience, namely, pills of silver nitrate or of potassium permanganate.

"Bearing in mind the peculiar nature of these substances, we must all agree that ordinary excipients will not be allowable; something must be used upon which these active chemicals will not react. Looking in the text-books we find that kaolin or fullers' earth with petrolatum is suitable, but this combination makes anything but a nice pill mass to work.

"I have experimented to a considerable extent on the process which I am now to describe, and the product is pharmaceutically elegant and therapeutically active notwithstanding the fact that one unfamiliar with it would say offhand that the pills would be better as bullets than as medicine. Experiments have shown that the mixture is completely disintegrated in the stomach and the chemical is presented in an active condition.

"Now for the process. Suppose the prescription calls for a dozen 1-grain pills of potassium permanganate. Place 12 grains potassium permanganate in a small glass mortar and powder finely. Weigh out 24 grains of paraffin, place it in a small porcelain capsule, warm until melted; allow the paraffin to cool, and when it is congealed loosen it from the capsule by running a spatula around the edge. Put the powdered chemical in the center of the paraffin and work the permanganate into the paraffin quickly with the fingers. Warm a pill-tile slightly by pouring on it a little alcohol and igniting it, then wiping with a clean towel. Roll out the pill mass quickly into a pipe and cut this into sections and shape the pills with the fingers. No dusting powder is necessary or even desirable, but talc may be used.

"Not more than twenty minutes will be required to prepare this prescription. Permanganate stains on the fingers may be removed by a solution of oxalic acid in dilute sulphuric acid. In the case of silver nitrate, the hands should be washed in a dilute cyanide solution followed by water to remove the dangerous cyanide.

"Speaking of pills reminds me of another scheme which is not often mentioned in works of reference. Pills of ferrous carbonate are probably the most used ferruginous tonic and the official formula is of such excellence that improvements are apt to be frowned upon. However, I do not deem it a sacrilege to state that the addition of a small amount of petrolatum will serve to keep the mass soft a very long time, with the added advantage of retarding the oxidation of the iron.

"I would like to state at this time that I am aware

that occasionally potassium permanganate and oxalic acid are prescribed in the same pill, the object being to secure a pill of freshly prepared manganese dioxide. In this case the reaction should be completed by triturating the chemicals together thoroughly and then massing with ordinary excipients, a process not unlike that for making ferrous carbonate pills."

A Larkspur Lotion.—

At the Denver meeting of the A. Ph. A., Otto Raubenheimer, of Brooklyn, N. Y., presented a paper before the Section on Practical Pharmacy and Dispensing on larkspur lotion. It appeared subsequently in the *Journal of the A. Ph. A.*, and we borrow the following:

"A blockhead bit by lice put out the light and chuckling cried: Now you can't see to bite."

"This verse taken from Greek Anthology might have been true in ancient times, but the present generation with its motto, 'Time is money,' requires a quick and effective remedy against *pediculi capitis* or sometimes even the variety *pubis*. The preparations of larkspur seed, *Delphinium consolida*, have from olden times enjoyed a reputation and are still in great demand all over the United States."

Mr. Raubenheimer, after much investigation, suggested a larkspur lotion of the following formula:

Delphinium, ground	100 grammes.
Acetic acid	50 Cc.
Glycerin	50 Cc.
Alcohol	100 Cc.
Water, a sufficient quantity to make...	1000 Cc.

Boil the ground larkspur seed with 800 Cc. of water, to which the acetic acid and glycerin have been added, for 10 minutes in a covered vessel. Set the mixture aside till cold, then add the alcohol and allow to macerate over night. Then filter and add sufficient water through the filter to make the product measure 1000 Cc.

"The finished tincture has a brownish-yellow color, resembling tincture of quassia, and a strongly acetic odor. It is clear, and even after standing about two months has remained clear. During this time I have sold it as 'larkspur lotion' at five cents per ounce, and it has given good satisfaction to my customers.

"I am making many experiments with this lotion with the object of improving it. I have tried increasing the acetic acid, glycerin and alcohol, and macerating and percolating instead of applying heat. I shall report on this at a later date.

"In my opinion the present lotion is far superior to a so-called tincture prepared by diluting 1 fluidounce of acetic fluidextract of larkspur with 1 fluidounce of alcohol and 14 fluidounces of water. The proportions in this so-called tincture are 60 and 60 in 1000 against 100 and 100 in 1000 in my lotion. The diluted fluidextract also forms a very heavy precipitate which very likely might contain some of the active constituents. And last, but not least, it does not require any pharmaceutical skill to dilute the fluidextract, while the preparation of the lotion gives the pharmacist a chance to practice pharmacy, and this, his birthright, he must not sell, as it will end his existence."

BOOKS

DUNN'S PURE FOOD AND DRUG LEGAL MANUAL. Volume I, pp. 2347. Edited by Charles Wesley Dunn, A.M., of the New York Bar; published by Dunn's Pure Food and Drug Legal Manual Corporation, 32 Liberty St., New York.

This work is a valuable tool in the hands of a discriminating and skilful artisan; but it will hardly enable a manufacturer or dealer to dispense with the services of a counselor in any matter of importance. For the purpose for which the work is intended it would probably not be complete without the mass of administrative decisions, rules, and regulations which are not law, as pointed out in the introduction, where we find: "The reader should keep in mind the distinction between the laws themselves and the rules and regulations, etc."

However, introductions and prefaces are rarely carefully read, and the non-professional reader is likely to conclude that the citations to adjudicated cases support the rule or decision, as the case may be, whereas the contrary is generally the truth. The statutes as construed by the courts comprise the law of the land, and a synopsis of the decisions of the courts in immediate connection, instead of the mere citations, would have made the work much more valuable without greatly increasing the space.

The topical scheme is altogether too intricate; being similar to the Corporation Manual published by the Corporation Manual Company, all the information contained in which may be found in the competing work published by the Ronald Press, containing about one-quarter the number of pages of the same size and even printed in larger type.

An ideal manual would be two volumes, one relating exclusively to drugs and the other to food. The Federal Statute as a pattern should be scientifically dissected, and in connection with each section or part of section should be printed an alphabetical list of the States having essentially the same provision; then the difference in the laws of the other States should be succinctly pointed out. For example: with respect to those affected by the law it might probably be truthfully stated once for all that individuals, co-partnerships and corporations came under the law in all the States. With respect to the act prohibited, it might be truthfully



AN ALASKAN VIEW.—This photograph, taken in Valdez, Alaska, is sent in to the BULLETIN by George G. Reis, a traveling representative of Parke, Davis & Co., who has presumably visited Alaska on a recent vacation trip. Of course you would expect to find snow in Alaska!

stated in two lines that the manufacture of an adulterated or misbranded drug product was prohibited by the laws of every Territory and State in the union; likewise with respect to the sale. When, however, we come to "giving away," "offering for sale," etc., it would be necessary to point out the peculiar features of the laws in each State, but this could all be brought within a single page.

Notwithstanding all this, as a book of reference the volume before us will prove almost indispensable to the law department or counselor of every manufacturer and dealer whose business extends beyond the confines of his own State.

CHAS. M. WOODRUFF.

POTTER'S "THERAPEUTICS, MATERIA MEDICA AND PHARMACY."

There is a disposition among scholars to criticize any attempt to treat more than one science in a single book. Especially is this true in medicine and pharmacy. But a perusal of Dr. Potter's "Therapeutics, Materia Medica, and Pharmacy" must convince the reader that this feat can sometimes be accomplished in a creditable manner if the author only knows how. Dr. Potter's work, while devoted more especially to the physiological action of drugs, at the same time contains not a little pharmacognosy and pharmacy. The result is a most useful book to medical and pharmaceutical students. In a single volume are given the special therapeutics of diseases and their symptoms, and the practical pharmacy of the different drugs and chemicals used in medicine. There are various other subjects that properly belong here, such as directions for prescription writing, incompatibilities and antidotes for poisons. The chapter on serums and vaccines contains the latest information along those lines.

By way of showing the systematic arrangement of the text we might turn our readers' attention to the pages on iodine. First appears the general description of the metal, its physical properties and the dose. Then follow the preparations of iodine, preparations of the iodide salts, hydriodic acid preparations, unofficial iodine compounds and incompatibles of iodine. No new iodine compound of any importance is omitted. Next comes the physiological action, then the therapeutics of iodine, of the iodides and the synthetic compounds of iodine. The whole arrangement is admirable.

The book contains 916 pages, but is a compact affair and permits of easy carriage. The price is \$5.00, net, in cloth. There is a thumb index in each copy. The pub-



These three young men dispense delectable beverages at the fountain of W. M. Higham & Co., New Bedford, Mass. Reading from the left they are Cliff Higham, Will Morris, and Herb Macy. Don't overlook the dog—pretty good looking purr!

lishers are P. Blakiston's Sons & Co., 1012 Walnut Street, Philadelphia.

ELEMENTS OF VEGETABLE HISTOLOGY.

Botany and pharmacognosy are big subjects. In the laboratory courses given in these branches of study there is need, therefore, of a brief volume which shall guide the beginner through the work. Daniel Base, Ph.D., of the University of Maryland, Department of Pharmacy, is the author of a small book that serves this purpose admirably. It is entitled "Elements of Vegetable Histology." As the name indicates, the book is a guide for students who are undertaking the study of plant tissues. A work of this character should meet with a ready reception among chemists or pharmacists who desire to make themselves expert in drug analysis and food inspection. By way of showing its practical character we point to certain chapters on "killing and fixing reagents," "schemes for making mounts of paraffin sections," and "stains and reagents used in the study of plant tissues."

To-day our food and drug laws have made the microscopical study of plants one of much importance. In fact, it were well-nigh impossible to detect adulterations in drugs without a working knowledge of plant histology. Dr. Base's "Elements of Vegetable Histology" should help beginners master this subject. The book is published by the author in Baltimore, Md. It contains 144 pages, bound in cloth. The price is \$1.50.

A CRITICAL REVISION OF THE GENUS EUCALYPTUS.

Part XVI of this work has been received recently. It is similar and equal in all respects to the preceding parts, all of which have been reviewed in these columns. The present number deals with 13 species:

Eucalyptus oleosa var. *Flocktoni*, *E. Le Souefii*, *E. Clelandi*, *E. decurva*, *E. doratoxylon*, *E. corrugata*, *E. goniantha*, *E. Stricklandi*, *E. Campaspe*, *E. diptera*, *E. Griffithsii*, *E. grossa*, *E. Pimpiniana*, and *E. Woodwardii*.

It is the largest number yet issued, including 32 pages of text and 4 plates; three species, *E. Le Souefii*, *E. Clelandi* and *E. Pimpiniana*, are here described as new.

The author is J. H. Maiden, F.L.S., Government Botanist of New South Wales. This monograph is published by the Government at 2s. 6d. per number.

THE PHYSICIAN'S VISITING LIST.

We are in receipt of the sixty-second annual volume of "The Physician's Visiting List," published by P. Blakiston's Son & Co., 1012 Walnut Street, Philadelphia, Pa. As usual, the price is \$1.25 net. This book has been described in previous issues of the BULLETIN, and our readers are familiar with its character.

Munn & Co. of New York City, publishers of the *Scientific American*, have just brought out a little book entitled "Trade Marks and Trade Names." It presents in simple manner an interpretation of the Federal statutes concerning trade-mark registration and protection. Incidentally it shows what can and what cannot be registered as a trade-mark. The book will be furnished for 25 cents, and it will be found very useful to all those who are interested in the subject.

QUERIES

Information is given in this department under the following conditions only: (1) No queries are answered by mail; (2) queries must reach us before the 15th of the month to be answered in the BULLETIN of the month following; (3) inquirers must in every instance be regular subscribers; and (4) names and addresses must be affixed to all communications.

Mouse and Rat Poisons.

C. B. M. writes: "Can you give me the formula of a rat exterminator, white and powdered, that is harmless to dogs and cats? The rats, on dying, are mummified and dry up, leaving no offensive smell. I want something that can be sent through the mails."

The vermin killers which cause rats to die in their holes and still do not create a bad odor from the decomposition of the bodies are composed of tartar emetic or barium carbonate. The former is supposed to induce vomiting in larger animals than rats; hence such a mixture is claimed to be harmless to dogs and cats. Barium carbonate is supposed to cause intense thirst in the animals, and this fact has suggested the addition of calcium sulphate to such compounds, the result being that when the animals drink, the calcium sulphate becomes hydrated and consequently the animals are literally petrified. But while all this sounds plausible, we can't get over a suspicion that these special claims for vermin-killers are largely imaginary.

An analysis of one well-known vermin-killer showed it to be composed of strychnine 5.8 per cent, barium carbonate 45 per cent, soot and flour 49.2 per cent.

Whether or not you could send a product like this through the mail may be a matter of question. The post-office authorities allow some latitude in this regard, although the law forbids sending poisons through the mail.

S. Bros. complain that they, too, are having trouble with rats. They write: "Have you any formula which you could recommend for killing moles, rats, and field mice? The moles attack the roots of the coffee plants and the field mice destroy the cane. We have tried strychnine, but with little effect."

TO POISON MOLES.

Worms are dipped in a concentrated solution of strychnine in dilute sulphuric acid, and laid in the runs of the moles. This does very well indeed.

The following pill destroys moles very quickly when put into their holes:

Arsenous acid	½ grain.
Pulverized acacia	½ grain.
Starch	2 grains.
Syrup	q. s.

Make into a pill.

Strychnine has a better effect than arsenic.

RAT POISONS.

The following formulas are good rat-killers:

(1) Strychnine sulphate	1 drachm.
Sugar of milk	3 drachms.
Prussian blue	5 grains.
Sugar	½ ounce.
Oat flour	½ ounce.

Triturate the first three ingredients in a mortar for five minutes, then add the sugar and flour. Mix well.

- (2) White arsenic1 ounce.
 Ultramarine10 grains.
 Corn-flour $\frac{1}{2}$ ounce.
 Sugar2 drachms.

Mix in the same manner as No. 1. From 10 to 20 drops of tincture of asafetida may be added.

- (3) Powdered squill1 ounce.
 Barium carbonate4 ounces.
 Oil of anise.....5 drops.

Mix.

This formula is used by rat-catchers.

Several formulas for phosphorus paste have appeared in the BULLETIN before, and may be found by consulting the annual indexes in the December issues.

Chewing Gums.

E. M. S.—The making of chewing gums is by no means the simple operation which it seems to be. Much experience in manipulation is necessary to succeed, and the published formulas can at best serve as a guide rather than as something to be absolutely and blindly followed. Thus, if the mass is either too hard or soft, change the proportions until it is right; often it will be found that different purchases of the same article will vary in their characteristics when worked up.

Chicle gum is purified by boiling with water and separating the foreign matter. Flavorings, pepsin, sugar, etc., are worked in under pressure by suitable machinery. Formulas:

- (1) Gum chicle.....1 pound.
 Sugar2 pounds.
 Glucose1 pound.
 Caramel butter.....1 pound.

First mash and soften the gum at a gentle heat. Place the sugar and glucose in a small copper pan; add enough water to dissolve the sugar; set the mixture on a fire and cook to 244° F.; lift off the fire; add the caramel butter and lastly the gum; mix well into a smooth paste; roll out on a smooth marble, dusting with finely powdered sugar, run through sizing machine to the proper thickness, cut into strips, and again into thin slices.

- (2) Chicle6 ounces.
 Paraffin2 ounces.
 Balsam of tolu.....2 drachms.
 Balsam of Peru.....1 drachm.
 Sugar20 ounces.
 Glucose8 ounces.
 Water6 ounces.
 Flavoring, enough.

Triturate the chicle and balsam in water; take out and add the paraffin, first heated. Boil the sugar, glucose, and water together to what is known to confectioners as "crack" heat, pour the syrup over the oil slab, and turn into the gum mixture, which will make it tough and plastic. Add any desired flavor.

- (3) Gum chicle122 parts.
 Paraffin42 parts.
 Balsam of tolu.....4 parts.
 Sugar384 parts.
 Water48 parts.

Dissolve the sugar in the water by the aid of heat and pour the resultant syrup on an oiled slab. Melt the gum, balsam, and paraffin together, and pour on top of the syrup, and work the whole up together.

- (4) Gum chicle240 parts.
 White wax64 parts.
 Sugar640 parts.
 Glucose128 parts.
 Water192 parts.
 Balsam of Peru.....4 parts.
 Flavoring matter, enough.

Proceed as indicated in No. 2.

"Anti-Freeze" Solutions for Automobiles.

A. C. S. asks us to publish one or two formulas for non-freezing compounds to be used for automobiles. He wants a preparation that will not hurt the engine or cause it to corrode or rust.

On page 480 of the November, 1911, BULLETIN appeared a somewhat lengthy article on non-freezing solu-

tions for automobiles. Inasmuch as the subject is one of unusual interest, and is likely to come up again this winter, we reprint the following from that issue:

Glycerin possesses certain characteristics which, to all appearances, would seem to make it an excellent non-freezing agent. It boils at an extremely high temperature and its freezing point can only be reached by artificial means. The cost is a consideration, however, as glycerin is exceedingly high and, unless commercially pure, is apt to contain fatty acids and produce destructive chemical action. It is conceded by leading authorities that it does destroy the rubber connections and after a short period becomes foul, thus necessitating frequent renewal.

Wood alcohol has been greatly favored for this line of work. In the presence of heat and oxygen, however, wood alcohol has a slight tendency to form formic acid, which might in time corrode the parts. It boils at a lower temperature than denatured alcohol, and consequently less of the latter is required, and as the tendency to evaporate is materially reduced, denatured alcohol is much cheaper to use for the purpose.

Alcohol (denatured) is the ordinary alcohol of commerce which has been made unfit for use as a beverage. It has absolutely no corrosive action on any of the metals with which it comes in contact, and its ability to withstand cold is indicated by the fact that it freezes at about -160° F. Its composition is necessarily uniform, because it is manufactured in accordance with a formula prescribed by and under the supervision of government chemists. It contains no solid matter, thus making it unnecessary to filter before using and eliminating all danger of its clogging the radiator.

20-per-cent solution freezes at about 10° above zero.

30-per-cent solution freezes at about 5° below zero.

40-per-cent solution freezes at about 20° below zero.

50-per-cent solution freezes at about 35° below zero.

Artificial Extract of Lemon.

C. N. H. writes: "Please publish a formula for making artificial extract of lemon. I have seen a recipe somewhat like this:

- Citral1 ounce.
 Oil of lemon.....15 ounces.
 Cologne spirit.....3 gallons.
 Water2 gallons.

"It seems impossible to filter this mixture unless we use pumice, and then the oil is filtered out. We have calls for this solution frequently and should be glad to have some information on the subject."

Let us state at the start that in marketing an artificial or imitation extract of lemon one must be very careful to observe the pure food laws.

The foregoing formula may be used as a working basis in the preparation of artificial extract of lemon, but we suggest that the quantity of the oil of lemon be reduced. Of course the trick in making an artificial extract of lemon lies in using citral, which imparts a lemon aroma to the solution. At the same time the use of citral makes it possible to dilute the alcohol with water as our correspondent has done. It will be noticed that there are three gallons of cologne spirits and two gallons of water in the foregoing formula.

Having reduced the amount of oil of lemon in this preparation the next precaution to be observed is pro-

longed agitation. The solution should be shaken for a long time before being filtered in order that as much of the oil as possible may go into solution.

Cheap Beef, Iron and Wine.

M. J. Z., realizing that wine of beef and iron of the National Formulary is expensive, asks for a formula of a cheap preparation.

The subject of a cheap beef, iron and wine is loaded. We have before us now a ruling of the Commissioner of Internal Revenue, Washington, D. C., dated August 23, 1912. It says:

"Special tax will be required for the manufacture and sale of beef, wine, and iron, unless it contains at least the percentages of beef and iron given in the formula on page 1821 of the nineteenth edition of the United States Dispensatory or is otherwise sufficiently medicated to be unsuitable for use as a beverage."

It is evident from the foregoing that you cannot make and sell a beef, iron and wine preparation below the N. F. standard unless you take out a rectifier's license.

If, however, you still desire to prepare a cheap beef, iron and wine, we suggest the following formula borrowed from the literature. It will be necessary to state the percentage of alcohol on the label:

Beef peptone	128 grains.
Tincture of iron citrochloride.....	1 fluidounce.
Water, warm	2 fluidounces.
Simple syrup	2 fluidounces.
Simple elixir	2 fluidounces.
Sherry or other suitable wine.....	25 fluidounces.

Dissolve the peptone in the warm water, add the other ingredients, and filter. Beef peptone is commercially available.

It would appear in the light of the ruling of the Internal Revenue Department that even if you state on the label the percentage of beef peptone and of tincture of iron citrochloride, you will not be free to make and sell the preparation without a rectifier's license.

Chilblain Remedies.

E. M. S. wants a formula for a chilblain remedy. During the winter there are frequent calls for such a preparation.

C. K. Bushey of Dillsburg, Pa., some time ago contributed the formula of a chilblain remedy to the BULLETIN that has since been incorporated in our book "350 Dollar Ideas for Druggists." Mr. Bushey says that the preparation gives almost instant relief. It consists of equal parts of balsam copaiba and chloroform. Apply to the affected area. If put up in a package of reasonable size, it sells for 25 cents.

The following formula yields a liniment that relieves chilblains:

Camphor	2 drachms.
Cantharides	2 drachms.
Mustard	½ ounce.
Oil of cajuput.....	1 ounce.
Oil of rosemary.....	3 drachms.
Alkanet	2 drachms.
Oil of turpentine.....	10 ounces.

Macerate ten days and filter. Rub in night and morning. Do not use on a broken surface.

Collodion compounds are also used to relieve frost-bite. A BULLETIN correspondent reports considerable success with the sale of compound salicylated collodion for the purpose.

Board-of-Pharmacy Secretaries in the United States.

F. R. W.—Here is the full list:

Alabama—E. P. Galt, Selma.
 Arizona—A. H. Hulett, Phoenix.
 Arkansas—J. F. Dowdy, Little Rock.
 California—Louis Zeh, San Francisco.
 Colorado—S. L. Bresler, Denver.
 Connecticut—J. A. Levery, Bridgeport.
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 Tennessee—I. B. Clark, Nashville.
 Texas—R. H. Walker, Gonzales.
 Utah—W. H. Dayton, Salt Lake.
 Vermont—D. F. Davis, Barre.
 Virginia—T. A. Miller, Richmond.
 Washington—James Lee, Seattle.
 West Virginia—Alfred Walker, Sutton.
 Wisconsin—Edward Williams, Madison.
 Wyoming—C. B. Gunnell, Evanston.

Liquid Face Rouge.

H. C. S. asks us to publish a formula of a liquid face rouge.

Here is a formula suggested by Dr. Max Joseph in his "Short Handbook of Cosmetics." It is known as Fluid Red Paint (Débay's Rose Liquide):

Potassium oxalate.....	7 grains.
Distilled water.....	8 ounces.
Alcohol	4 drachms.
Carmine	7 grains.
Ammonia water.....	3½ grains.

Here are two other formulas borrowed from The New Standard Formulary:

- (1) Carmine1 drachm.
 Ammonia water.....6 fluidrachms.
 Water

Spirit of rose.....2 fluidrachms.

Mix, set aside 24 hours or longer if necessary, agitating frequently till the ammonia has evaporated, then filter.

- (2) Eosin

Water

Glycerin

Alcohol

Cologne water.....3 fluidounces.

Mix and dissolve.

Making Castor Oil Red.

F. J. A. wants a coloring agent for the preparation of ruby castor oil. Use "oil red soluble" to color the castor oil. This coloring agent can be obtained from Theodore H. Eaton & Son of Detroit, or from other dye houses.

W. F. P.—We are unable to tell you the composition of the proprietary preparation which you mention.

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